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Benares Hindu University.

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# CALENDAR

1916-1921

Part I



PUBLISHED BY :  
THE BENARES HINDU UNIVERSITY,  
BENARES.

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## Contents.

	Page.
<b>ALMANAC FOR 1921</b> ... ..	IX-XX
<b>THE BENARES HINDU UNIVERSITY ACT.</b> ...	I-II
1. Short title and commencement	1
2. Definitions	"
3. Incorporation	2
4. University open to all castes and creeds, save as regards religious instruction	3
5. Lord Rector, Patrons and Vice-Patrons	"
6. Visitor	"
7. Authorities and officers of the University	4
8. Powers and duties of officers, terms of office and filling up of casual vacancies	"
9. The Court	"
10. The Council	5
11. The Senate	"
12. The Syndicate	"
13. Audit of Accounts	"
14. Permanent reserve to cover recurring charges	6
15. Maintenance and admission to privileges of Colleges	"
16. Recognition of degrees	7
17. Statutes	"
18. Regulations	8
19. Emergency powers of the Governor-General in Council	9
20. Dissolution and transfer of property of the Hindu University Society	10
<b>THE STATUTES.</b>	
1. Definitions	11
2. Membership of the University	"
3. Patrons and Vice-Patrons	"
4. The Chancellor	12
5. Powers of the Chancellor	"
6. The Pro- Chancellor	"
7. Powers of the Pro-Chancellor	"
8. The Vice-Chancellor	13

	Page.
9. Powers of the Vice-Chancellor	13
10. The Pro-Vice-Chancellor	14
11. Powers of the Pro-Vice-Chancellor	"
12. The Registrar	"
13. The Treasurer	15
14. The Court	"
15. Exercise of control by the Court	19
16. Meetings of the Court	"
17. The Council	20
18. Powers of the Council	21
19. The Senate	22
20. Powers of the Senate	24
21. The Syndicate	25
22. Duties of the Syndicate	"
23. The Faculties	26
24. Powers of Faculties	27
25. Convocations	"
26. Committees	"
27. Board of Appointments	"
28. Acts during vacancies	28
29. Elected Chairman to preside where no provision made by the Statute	"
30. Re-appointment and re-election	"
31. Resignation	"
32. Removal	29
33. Notices of Annual Meetings	"
34. Notice of proposals or amendments	"
35. Notice of Special General Meetings and business to be transacted	30
36. Procedure at meetings to be regulated by rules to be made by the Court	"
37. Deans of the faculties	"
38. Vacancy in the office of Dean of Faculty	"
39. Contracts	"
40. Donor's list	32
41. Future donors	"
42. Registered donors	"
43. Nomination of representatives of joint family, etc.	"
44. Indian Prince or Chief, not invested with powers of administration	33
45. Disability of the donor	"

	Page.
46. Notice of vacancy in the Court	33
47. Nomination by electors	34
48. Signature and authenticating nomination papers	..
49. Custody of nomination papers	..
50. List of persons nominated	35
51. Election how to be made	..
52. Voting by electors	..
53. Delivery and custody of voting papers	..
54. Scrutiny of voting papers	..
55. Declaration of the result of voting	36
56. Election in case of ties	..
57. Reference to Vice-Chancellor of objection to voting papers or to decisions of the Secretary	..
58. Forms of nomination and voting papers	..
59. Irregularity in postal delivery	..
60. Definition of 'Secretary'	..
61. Addition to Statute 19	37
62. Addition to Statute 27	..
63. Extension of the term of the members of the Court and officers	..
64. Religious instruction compulsory to Hindus	38
65. Faculty of Theology to organize studies in religion	..
66. Faculty of Theology to appoint Committee for religious worship and instruction in hostels	..
67. Attendance at religious lectures, etc.	..
68. Constitution of Committee in charge of reli- gious instruction	..
69. Powers of the Convener in emergency cases	39
70. Meetings of the Committee	..
71. Basis of instruction in Hindu religion	..
72. Provision for maintenance, etc. of Central Hin- du School	..
73. Departments of the School	..
74. Religious instruction in the School	40
75. Each department of the School to be in charge of a Head	..
76. Constitution of the School Board	..
77. Tenure of office of the members of the School Board	..
78. School Budget	..

	Page.
79. Appointment of Head-master	41
80. Powers of the School Board	..
81. Properties belonging to the School to be properties of the University	..
<b>THE REGULATIONS.</b>	
I. The Senate	42
II. The Syndicate	49
III. The Faculties	51
IV. The Boards of Studies	53
V. The Boards of Examiners	54
VI. The Registrar and the Assistant Registrar	..
VII. The Librarian	55
VIII. The University Library	..
IX. Register of University Students	57
X. Registration of Graduates	58
XI. Residence of students	59
XII. Students' Residence Committee	62
XIII. Discipline	63
XIV. Admission of Students	64
XV. Admission of Women Students and special Regulations governing their residence, examination, etc.	71
XVI. Admission of Colleges to privileges of the University	72
XVII. Recognition of Schools	75
XVIII. Honorary Degrees	77
XIX. Convocation	78
XX. Fellowships, Studentships, Scholarships, Medals and Prizes	..
XXI. Endowments	..
XXII. Academic Costumes	79
XXIII. Fees	..
XXIV. Remuneration to Examiners	80
XXV. Laboratories, Museums and Botanical Gardens	..
XXVI. Examinations ( <i>General Rules</i> )	..
XXVII. Admission Examinations in Arts and Science	82
XXVIIA. The Previous Examination in Samskrit	84
XXVIII. Intermediate Examination in the Faculties of Arts and Science	..
XXIX. Bachelor of Arts	87
XXX. Master of Arts	90

	Page.
XXXI. Doctor of Letters	92
XXXII. Bachelor of Science (B.Sc.)	93
XXXIII. Master of Science	95
XXXIV. Doctor of Science (D.Sc.)	97
XXXIVA. Bachelor of Science (Engineering)	99
XXXV. Bachelor of Law	104
XXXVI. Master of Law	106
XXXVII. Doctor of Law	107
XXXVIII. The Faculty of Oriental Learning	109
XXXIX. The Faculty of Theology	114
XL. Admission of Students	119
XLI. Licentiate of Teaching	127
<b>TRANSITORY REGULATIONS PASSED BY THE</b>	
<b>SENATE</b>	<b>129</b>
<b>RULES MADE BY THE SYNDICATE.</b>	

I. Recognition of examinations as equivalent to the Admission Examination of the Benares Hindu University	133
II. Constitution, powers and duties of the Boards of Examiners	"
III. Remuneration to Examiners	136
IV. Fees for admission to the University Examinations	138
V. Tuition Fees and Hostel Fees	139
VI. Re-totalling of Marks	140
VII. Obtaining Marks from the Registrar	"
VIII. Appointment of Wardens and Assistant Wardens	"
IX. Rules for the Election of Two Representatives of the Students to the Students' Residence Committee	141
X. Rules for the Internal Management of the Hostels of the Benares Hindu University	"
XI. The Academic Costumes	145
XII. Rules for and Procedure to be adopted at the Convocation for conferring Degrees	147

#### **RULES MADE BY THE COUNCIL.**

I. Rules regarding the payment of Travelling and Halting Allowances to the Members of University Bodies and the Examiners	151
---	-----



	Page.
II. Travelling and Halting Allowance Rules for officers serving under the University ..	153
III. Rules regarding the relations between the Principals and the University Professors of the Benares Hindu University ... ..	154
IV. Leave Rules for the Employees of the Benares Hindu University ... ..	156
V. Rules of the Provident Fund of the Benares Hindu University ... ..	158
<b>FORMS.</b>	
(A) Forms of Application for admission to examinations ... ..	166
(B) Forms for the Registration of Graduates ...	205
(C) Forms for the Enrolment of Students as Members of the University ... ..	209
(D) Forms of Certificates and Diplomas ..	220
<b>SYLLABUS AND TEXT-BOOKS, 1918.</b>	
Intermediate Examination ... ..	229
B. A. .. ..	"
B. Sc. .. ..	"
M. A. Previous .. ..	"
M. A. Final .. ..	"
M. Sc. Previous .. ..	"
M. Sc. Final .. ..	232
Pravesika .. ..	"
<b>SYLLABUS AND TEXT-BOOKS, 1919.</b>	
Admission Examination .. ..	235
Intermediate .. ..	252
B. A. .. ..	"
B. Sc. .. ..	"
M. A. Previous .. ..	253
M. A. Final .. ..	266
M. Sc. .. ..	"
L. T. .. ..	272
Pravesika .. ..	275
<b>SYLLABUS AND TEXT-BOOKS, 1920.</b>	
Admission Examination .. ..	276
Intermediate .. ..	"
B. A. .. ..	297

	Page.
B. Sc. ....	311
M. A. Examination .....	326
M. Sc. ....	353
L. T. ....	362
B. Sc. (Engineering) Examination ..	363
Previous Examination in Sanskrit ..	411
Pravesika ..	"
Madhyama .. (Faculty of Oriental Learning)	"
Madhyama .. (Faculty of Theology) ...	416

### SYLLABUS AND TEXT-BOOKS, 1921.

Admission Examination ... ..	417
Intermediate ..	421
B. A. ....	"
B. Sc. ....	422
M. A. ....	"
M. Sc. ....	431
B. Sc. (Engineering) Examination ...	433
L. T. ....	"
Pravesika ..	"
Madhyama (Faculty of Oriental Learning) ..	"
Madhyama (Faculty of Theology) ...	434
Shastri ... ..	"
Smritiratna ... ..	441
Darmasastrī ... ..	442

APPENDIX A (Important Dates) ..	443
---------------------------------	-----

APPENDIX B (The Foundation-Stone Laying Ceremony)	448
---	-----

APPENDIX C (The Opening Ceremony) ...	488
---------------------------------------	-----



## ALMANAC, 1921.

## January,

Date.	Day.	संवत् १९३०.	
1	Sat. (शनि)	पौष कृष्ण ८	New Year's day.
2	Sun. (रवि)	" ९	
3	Mon. (सोम)	" १०	
4	Tues. (मंगल)	" ११	
5	Wed. (बुध)	" १२	
6	Thur. (गुरु)	" १३	
7	Fri. (शुक्र)	" १४	
8	Sat. (शनि)	" १५	
9	Sun. (रवि)	" १६	
10	Mon. (सोम)	पौष शुक्र १	Previous Examination in Samskrit.
11	Tues. (मंगल)	" २	
12	Wed. (बुध)	" ३	
13	Thur. (गुरु)	" ४	Makarasamkranti (मकर-संक्रांति)
14	Fri. (शुक्र)	" ५	
15	Sat. (शनि)	" ६	
16	Sun. (रवि)	" ७	
17	Mon. (सोम)	" ८	
18	Tues. (मंगल)	" ९	
19	Wed. (बुध)	" १०	
20	Thur. (गुरु)	" ११	
21	Fri. (शुक्र)	" १२	
22	Sat. (शनि)	" १३	
23	Sun. (रवि)	" १४	University of Calcutta incorporated, 1857.
24	Mon. (सोम)	माघ कृष्ण १	
25	Tues. (मंगल)	" २	
26	Wed. (बुध)	" ३	
27	Thur. (गुरु)	" ४	
28	Fri. (शुक्र)	" ५	
29	Sat. (शनि)	" ६	
30	Sun. (रवि)	" ७	
31	Mon. (सोम)	" ८	

ALMANAC, 1921—(contd.)

February

Date.	Day.	संवत् १९७७	
1	Tues. (मंगल)	माघ कृष्ण ९	
2	Wed. (बुध)	,, १०	
3	Thur. (गुरु)	,, ११	
4	Fri. (शुक्र)	,, १२	
5	Sat. (शनि)	,, १३	
6	Sun. (रवि)	,, १४	
7	Mon. (सोम)	,, ३०	Somavati Amavasya. (सोमवती अमावस्या).
8	Tues. (मंगल)	माघ शुक्ल १	
9	Wed. (बुध)	,, १	
10	Thur. (गुरु)	,, २	
11	Fri. (शुक्र)	,, ३	
12	Sat. (शनि)	,, ४	
13	Sun. (रवि)	,, ५	Vasanta Panchami. (वसन्त पञ्चमी).
14	Mon. (सोम)	,, ६	
15	Tues. (मंगल)	,, ७	
16	Wed. (बुध)	,, ८	
17	Thur. (गुरु)	,, १०	
18	Fri. (शुक्र)	,, ११	
19	Sat. (शनि)	,, १२	
20	Sun. (रवि)	,, १३	
21	Mon. (सोम)	,, १४	
22	Tues. (मंगल)	,, १५	Maghi Purnima. (माघ पूर्णिमा).
23	Wed. (बुध)	फाल्गुन कृष्ण १	
24	Thur. (गुरु)	,, २	
25	Fri. (शुक्र)	,, ३	
26	Sat. (शनि)	,, ४	
27	Sun. (रवि)	,, ५	
28	Mon. (सोम)	,, ६	

ALMANAC, 1921—(contd:)  
March.

Date.	Day.	संवत् १९७७	
1	Tues. ( मंगल )	फाल्गुन कृष्ण ७	Previous Examination in Samskrit.
2	Wed. ( बुध )	" ८	
3	Thur. ( गुरु )	" ९	
4	Fri. ( शुक्र )	" १०	
5	Sat. ( शनि )	" ११	
6	Sun. ( रवि )	" १२	Shivaratri ( शिवरात्रि ).
7	Mon. ( सोम )	" १३	
8	Tues. ( मंगल )	" १४	
9	Wed. ( बुध )	" १५	
10	Thur. ( गुरु )	फाल्गुन शुक्ल १	
11	Fri. ( शुक्र )	" २	Admission, and Pravesika Examina- tions begin.
12	Sat. ( शनि )	" ३	
13	Sun. ( रवि )	" ४	
14	Mon. ( सोम )	" ५	
15	Tues. ( मंगल )	" ६	
16	Wed. ( बुध )	" ७	
17	Thur. ( गुरु )	" ८	
18	Fri. ( शुक्र )	" ९	
19	Sat. ( शनि )	" १०	
20	Sun. ( रवि )	" ११	Holi ( होली ) Holi ( होली ). Indian Universities Act (VIII of 1904) passed
21	Mon. ( सोम )	" १२	
22	Tues. ( मंगल )	" १३	
23	Wed. ( बुध )	" १४	
24	Thur. ( गुरु )	चैत्र कृष्ण १	
25	Fri. ( शुक्र )	" २	
26	Sat. ( शनि )	" ३	
27	Sun. ( रवि )	" ४	
28	Mon. ( सोम )	" ५	
29	Tues. ( मंगल )	" ६	
30	Wed. ( बुध )	" ७	
31	Thur. ( गुरु )	" ८	

ALMANAC. 1921—(contd.)

April.

Date.	Day.	संवत् १९७७-७८	
1	Fri. ( शुक्र )	चैत्र कृष्ण ९	Benares Hindu University Act (XVI of 1915) enforced, 1916
2	Sat. ( शनि )	,, ९	
3	Sun. ( रवि )	,, १०	Intermediate, B.A., B.Sc. and Madhyama Examinations begin.
4	Mon. ( सोम )	,, ११	
5	Tues. ( मंगल )	,, १२	
6	Wed. ( बुध )	,, १३	
7	Thur. ( गुरु )	,, १४	
8	Fri. ( शुक्र )	,, १५	
9	Sat. ( शनि )	चैत्र शुक्ल १ सं०	१९७८
10	Sun. ( रवि )	,, २	Ramanavami (रामनवमी).
11	Mon. ( सोम )	,, ३	
12	Tues. ( मंगल )	,, ४	
13	Wed. ( बुध )	,, ५	
14	Thur. ( गुरु )	,, ६	
15	Fri. ( शुक्र )	,, ७	
16	Sat. ( शनि )	,, ८	
17	Sun. ( रवि )	,, १०	M.A., M.Sc. (except M.A. Final in Sanskrit and M.Sc. Final in Physics) L.T., and Shastri Examinations begin.
18	Mon. ( सोम )	,, ११	
19	Tues. ( मंगल )	,, १२	
20	Wed. ( बुध )	,, १३	
21	Thur. ( गुरु )	,, १४	
22	Fri. ( शुक्र )	,, १५	
23	Sat. ( शनि )	चैत्र शुक्ल १	
24	Sun. ( रवि )	,, २	
25	Mon. ( सोम )	,, ३	
26	Tues. ( मंगल )	,, ४	
27	Wed. ( बुध )	,, ५	
28	Thur. ( गुरु )	,, ६	
29	Fri. ( शुक्र )	,, ७	
30	Sat. ( शनि )	,, ८	

## ALMANAC, 1921 -(contd.)

## May.

Date.	Day.	संवत् १९०८	
1	Sun. ( रवि )	वैशाख कृष्ण ६	Summer Vacation begins Intermediate (Engineer- ing), Parts I and II Examinations begin.
2	Mon. ( सोम )	" १०	
3	Tues. ( मंगल )	" ११	
4	Wed. ( बुध )	" १२	
5	Thur. ( गुरु )	" १३	
6	Fri. ( शुक्र )	" १४	
7	Sat. ( शनि )	" ३०	
8	Sun. ( रवि )	वैशाख शुक्र १	
9	Mon. ( सोम )	" २	
10	Tues. ( मंगल )	" ३	
11	Wed. ( बुध )	" ४	
12	Thur. ( गुरु )	" ५	
13	Fri. ( शुक्र )	" ६	
14	Sat. ( शनि )	" ७	
15	Sun. ( रवि )	" ८	
16	Mon. ( सोम )	" ९	
17	Tues. ( मंगल )	" ११	
18	Wed. ( बुध )	" १२	
19	Thur. ( गुरु )	" १३	
20	Fri. ( शुक्र )	" १४	
21	Sat. ( शनि )	" १५	
22	Sun. ( रवि )	स्येष्ठ कृष्ण १	
23	Mon. ( सोम )	" २	
24	Tues. ( मंगल )	" ३	
25	Wed. ( बुध )	" ४	
26	Thur. ( गुरु )	" ५	
27	Fri. ( शुक्र )	" ६	
28	Sat. ( शनि )	" ७	
29	Sun. ( रवि )	" ८	
30	Mon. ( सोम )	" ९	
31	Tues. ( मंगल )	" १०	



## ALMANAC, 1921—(contd.)

## June.

Date.	Day.	संवत् १९७८	
1	Wed. ( बुध )	उद्येष्ट कृत्तिका १०	
2	Thur. ( गुरु )	" ११	
3	Fri. ( शुक्र )	" १२	
4	Sat. ( शनि )	" १३	
5	Sun. ( रवि )	" १४	
6	Mon. ( सोम )	" १५	Somavati Amavasya.
7	Tues. ( मंगल )	उद्येष्ट शुक्र १	(सोमवती अमावस्या).
8	Wed. ( बुध )	" २	
9	Thur. ( गुरु )	" ४	
10	Fri. ( शुक्र )	" ५	
11	Sat. ( शनि )	" ६	
12	Sun. ( रवि )	" ७	
13	Mon. ( सोम )	" ८	
14	Tues. ( मंगल )	" ९	
15	Wed. ( बुध )	" १०	
16	Thur. ( गुरु )	" ११	
17	Fri. ( शुक्र )	" १२	
18	Sat. ( शनि )	" १३	
19	Sun. ( रवि )	" १४	
20	Mon. ( सोम )	" १५	
21	Tues. ( मंगल )	आषाढ कृत्तिका १	
22	Wed. ( बुध )	" २	
23	Thur. ( गुरु )	" ३	
24	Fri. ( शुक्र )	" ४	
25	Sat. ( शनि )	" ५	
26	Sun. ( रवि )	" ६	
27	Mon. ( सोम )	" ७	
28	Tues. ( मंगल )	" ८	
29	Wed. ( बुध )	" ९	
30	Thur. ( गुरु )	" १०	

## ALMANAC, 1921—(contd.)

## July.

Date.	Day.	संवत् १९७८	
1	Fri. ( शुक्र )	आषाढ कृष्ण ११	
2	Sat. ( शनि )	" १२	
3	Sun. ( रवि )	" १३	
4	Mon. ( सोम )	" १४	
5	Tues. ( मंगल )	" ३०	
6	Wed. ( बुध )	आषाढ शुक्ल १	
7	Thur. ( गुरु )	" २	
8	Fri. ( शुक्र )	" ३	Intermediate Examination (Economics).
9	Sat. ( शनि )	" ४	
10	Sun. ( रवि )	" ५	
11	Mon. ( सोम )	" ६	
12	Tues. ( मंगल )	" ७	
13	Wed. ( बुध )	" ८	
14	Thur. ( गुरु )	" ९	
15	Fri. ( शुक्र )	" १०	Colleges open after Summer Vacation.
16	Sat. ( शनि )	" ११	
17	Sun. ( रवि )	" १२	
18	Mon. ( सोम )	" १३	University of Bombay incorporated, 1857. M.A. Final Examination in Sanskrit and M. Sc. Final in Physics held.
19	Tues. ( मंगल )	" १४	
20	Wed. ( बुध )	आषाढ कृष्ण १	
21	Thur. ( गुरु )	" २	
22	Fri. ( शुक्र )	" ३	
23	Sat. ( शनि )	" ४	
24	Sun. ( रवि )	" ५	
25	Mon. ( सोम )	" ६	
26	Tues. ( मंगल )	" ७	
27	Wed. ( बुध )	" ८	
28	Thur. ( गुरु )	" ९	
29	Fri. ( शुक्र )	" १०	
30	Sat. ( शनि )	" ११	
31	Sun. ( रवि )	" १२	

## ALMANAC, 1921—(contd.)

August.

Date	Day.	संवत् १९७८	
1	Mon. ( सोम )	आवण कृष्ण १२	
2	Tues. ( मंगल )	.. १३	
3	Wed. ( बुध )	.. ३०	
4	Thur. ( गुरु )	आवण शुक्ल १	
5	Fri. ( शुक्र )	.. २	
6	Sat. ( शनि )	.. ३	
7	Sun. ( रवि )	.. ४	Nag Panchami (नागपञ्चमी)
8	Mon. ( सोम )	.. ५	
9	Tues. ( मंगल )	.. ६	
10	Wed. ( बुध )	.. ७	
11	Thur. ( गुरु )	.. ८	
12	Fri. ( शुक्र )	.. ९	
13	Sat. ( शनि )	.. १०	
14	Sun. ( रवि )	.. ११	Raksha-bandhana (रक्षाबन्धनम्)
15	Mon. ( सोम )	.. १२	
16	Tues. ( मंगल )	.. १३	
17	Wed. ( बुध )	.. १४	
18	Thur. ( गुरु )	.. १५	
19	Fri. ( शुक्र )	भाद्रपद कृष्ण १	
20	Sat. ( शनि )	.. २	
21	Sun. ( रवि )	.. ३	Janmashtami (श्रीकृष्ण जन्माष्टमी)
22	Mon. ( सोम )	.. ४	
23	Tues. ( मंगल )	.. ५	
24	Wed. ( बुध )	.. ६	
25	Thur. ( गुरु )	.. ७	
26	Fri. ( शुक्र )	.. ८	
27	Sat. ( शनि )	.. ९	
28	Sun. ( रवि )	.. १०	
29	Mon. ( सोम )	.. ११	
30	Tues. ( मंगल )	.. १२	
31	Wed. ( बुध )	.. १३	

## ALMANAC, 1921—(contd.)

## September.

Date.	Day.	संवत् १९७८	
1	Thur. ( गुरु )	भाद्रकृष्ण १४	
2	Fri. ( शुक्र )	" ३०	Kushotpatini (कुशोत्पाटिनी)
3	Sat. ( शनि )	भाद्रशुक्ल १	
4	Sun. ( रवि )	" ३	University of Madras incorporated 1857.
5	Mon. ( सोम )	" ४	Ganesh-chaturthi.
6	Tues. ( मंगल )	" ५	(गणेशचतुर्थी).
7	Wed. ( बुध )	" ६	
8	Thur. ( गुरु )	" ७	
9	Fri. ( शुक्र )	" ८	
10	Sat. ( शनि )	" ९	
11	Sun. ( रवि )	" १०	
12	Mon. ( सोम )	" ११	
13	Tues. ( मंगल )	" १२	
14	Wed. ( बुध )	" १२	
15	Thur. ( गुरु )	" १३	Ananta-chaturdashi
16	Fri. ( शुक्र )	" १४	(अनन्तचतुर्दशी)
17	Sat. ( शनि )	" १५	
18	Sun. ( रवि )	आश्विन कृष्ण १	
19	Mon. ( सोम )	" २	
20	Tues. ( मंगल )	" ३	
21	Wed. ( बुध )	" ४	
22	Thur. ( गुरु )	" ५	
23	Fri. ( शुक्र )	" ६	
24	Sat. ( शनि )	" ७	
25	Sun. ( रवि )	" ८	
26	Mon. ( सोम )	" ९	Matrinavami (मातृनवमी).
27	Tues. ( मंगल )	" ११	
28	Wed. ( बुध )	" १२	
29	Thur. ( गुरु )	" १३	
30	Fri. ( शुक्र )	" १४	

## ALMANAC, 1921—(contd.)

## October.

Date.	Day.	संवत् १९०८	
1	Sat. ( शनि )	आश्विन कृष्ण ३०	Mahalaya Amavasya (महालया अमावस्या). Benares Hindu Uni- versity Act (XVI of 1915), passed 1915. Patna University in- corporated, 1917.
2	Sun. ( रवि )	आश्विन शुक्ल १	Durgapuja holidays be- gin.
3	Mon. ( सोम )	" २	
4	Tues. ( मंगल )	" ३	
5	Wed. ( बुध )	" ४	
6	Thur. ( गुरु )	" ५	
7	Fri. ( शुक्र )	" ६	श्रीविलयादशमी
8	Sat. ( शनि )	" ७	
9	Sun. ( रवि )	" ८	
10	Mon. ( सोम )	" ९	
11	Tues. ( मंगल )	" १०	
12	Wed. ( बुध )	" ११	University of Panjab incorporated, 1882.
13	Thur. ( गुरु )	" १२	
14	Fri. ( शुक्र )	" १३	
15	Sat. ( शनि )	" १४	
16	Sun. ( रवि )	" १५	Lunar Eclipse (चन्द्रग्रहण).
17	Mon. ( सोम )	कार्तिक कृष्ण १	
18	Tues. ( मंगल )	" २	
19	Wed. ( बुध )	" ३	
20	Thur. ( गुरु )	" ४	
21	Fri. ( शुक्र )	" ५	Previous Examination in Samskrit.
22	Sat. ( शनि )	" ६	
23	Sun. ( रवि )	" ७	
24	Mon. ( सोम )	" ८	
25	Tues. ( मंगल )	" ९	
26	Wed. ( बुध )	" १०	Deepavali (दीपावली). do. (दीपावली).
27	Thur. ( गुरु )	" ११	
28	Fri. ( शुक्र )	" १२	
29	Sat. ( शनि )	" १३	
30	Sun. ( रवि )	" १४	
31	Mon. ( सोम )	कार्तिक शुक्ल १	

## ALMANAC, 1921—(contd.)

## November.

Date.	Day.	संवत् १९७८	
1	Tues. ( मंगल )	कार्तिक शुक्ल ९	Yamadwitiya (यमद्वितीया). Lucknow University incorporated.
2	Wed. ( बुध )	" १०	
3	Thur. ( गुरु )	" ११	
4	Fri. ( शुक्र )	" १२	
5	Sat. ( शनि )	" १३	
6	Sun. ( रवि )	" १४	Akshayanavami (अक्षयनवमी) Prabodhini Ekadashi (प्रबोधिनी एकादशी).
7	Mon. ( सोम )	" १५	
8	Tues. ( मंगल )	" १६	
9	Wed. ( बुध )	" १७	
10	Thur. ( गुरु )	" १८	
11	Fri. ( शुक्र )	" १९	
12	Sat. ( शनि )	" २०	
13	Sun. ( रवि )	" २१	कार्तिकी पूर्णिमा). University of Allaha- bad incorporated, 1887.
14	Mon. ( सोम )	" २२	
15	Tues. ( मंगल )	" २३	
16	Wed. ( बुध )	मार्गशीर्ष कृष्ण १	
17	Thur. ( गुरु )	" २	
18	Fri. ( शुक्र )	" ३	
19	Sat. ( शनि )	" ४	
20	Sun. ( रवि )	" ५	Fifth Annual Meeting of the Court.
21	Mon. ( सोम )	" ६	
22	Tues. ( मंगल )	" ७	
23	Wed. ( बुध )	" ८	
24	Thur. ( गुरु )	" ९	
25	Fri. ( शुक्र )	" १०	
26	Sat. ( शनि )	" ११	
27	Sun. ( रवि )	" १२	
28	Mon. ( सोम )	" १३	
29	Tues. ( मंगल )	" १४	
30	Wed. ( बुध )	मार्गशीर्ष शुक्ल १	

## ALMANAC, 1921—(contd.)

## December.

Date.	Day.	संवत् १९७८	
1	Thur. ( गुरु )	"	२
2	Fri. ( शुक्र )	"	३
3	Sat. ( शनि )	"	४
4	Sun. ( रवि )	"	५
5	Mon. ( सोम )	"	६
6	Tues. ( मंगल )	"	७
7	Wed. ( बुध )	"	८
8	Thur. ( गुरु )	"	९
9	Fri. ( शुक्र )	"	१०
10	Sat. ( शनि )	"	११
11	Sun. ( रवि )	"	१२
12	Mon. ( सोम )	"	१३
13	Tues. ( मंगल )	"	१४
14	Wed. ( बुध )	"	१५
15	Thur. ( गुरु )	"	१६
16	Fri. ( शुक्र )	पौष कृष्ण	१
17	Sat. ( शनि )	"	२
18	Sun. ( रवि )	"	३
19	Mon. ( सोम )	"	४
20	Tues. ( मंगल )	"	५
21	Wed. ( बुध )	"	६
22	Thur. ( गुरु )	"	७
23	Fri. ( शुक्र )	"	८
24	Sat. ( शनि )	"	९
25	Sun. ( रवि )	"	१०
26	Mon. ( सोम )	"	११
27	Tues. ( मंगल )	"	१२
28	Wed. ( बुध )	"	१३
29	Thur. ( गुरु )	"	१४
30	Fri. ( शुक्र )	पौष शुक्ल	१
31	Sat. ( शनि )	"	२

Aligarh Muslim University incorporated.

Coronation Day.  
His Royal Highness the Prince of Wales opens the New Buildings of the University. Special Convocation for conferring the degree of Doctor of Letters on His Royal Highness. Convocation for conferring degrees. Adjourned Annual meeting of the Court.

Winter Vacation begins.

**THE**  
**BENARES HINDU UNIVERSITY ACT**  
**(ACT XVI OF 1915.)**

PASSED BY THE GOVERNOR-GENERAL OF INDIA  
IN COUNCIL.

*(Received the assent of the Governor-General on  
the 1st October, 1915.)*

An Act to establish and incorporate a teaching and residential Hindu University at Benares.

WHEREAS it is expedient to establish and incorporate a teaching and residential Hindu University at Benares, and to dissolve the Hindu University Society, a Society registered under the Societies Registration Act, 1860, and to transfer to, and vest in the said University all property and rights now vested in the said Society; it is hereby enacted as follows :—

XXI of  
1860.

Short title and commencement.      1. (1) This Act may be called the Benares Hindu University Act, 1915.

(2) It shall come into force on such date\* as the Governor-General in Council may, by notification in the Gazette of India, direct.

2. In this Act, unless there is anything repugnant Definitions.      in the subject or context,—

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\* Came into force on the 1st April, 1916, vide Notification No. 255, dated the 23rd March, 1916, published in the Gazette of India, dated the 25th March, 1916, Part I, p. 352.



- (a) "College" means any College or institution maintained or admitted to privileges by the University ;
- (b) "Council" means the University Council ;
- (c) "Court" means the University Court ;
- (d) "Faculty" means a Faculty of the University ;
- (e) "Regulations" means the Regulations of the University for the time being in force ;
- (f) "Senate" means the Senate of the University ;
- (g) "Statutes" means the Statutes of the University for the time being in force ; and
- (h) "University" means the Benares Hindu University.

**3.** (1) The First Chancellor, Pro-Chancellor and Vice-Chancellor who shall be the persons specified in this behalf by a notification of the Governor-General in Council in the Gazette of India, and the persons indicated in Schedule I as members of the Court and the Senate, and all persons who may hereafter become, or be appointed as such officers or members, so long as they continue to hold such office or membership, shall be constituted a body corporate by the name of the Benares Hindu University.

(2) The University shall have perpetual succession and a Common Seal, and shall sue, and be sued, by the name first aforesaid.

(3) The University shall be deemed to have been incorporated for the purposes, among others, of making provision for imparting education, literary, artistic and scientific, as well as agricultural, technical, commercial and professional, of furthering the prosecution of original research, and of giving instruction in Hindu theology and religion, and of promoting the study of literature, art, philosophy, history, medicine

and science, and of imparting physical and moral training.

4. (1) The University shall, subject to the Regulations, be open to persons of all classes, castes and creeds, but provision shall be made for religious instruction and examination in Hindu religion only.

(2) The Court shall have power to make Statute providing that instruction in Hindu religion shall be compulsory in the case of Hindu students, and shall also have power to make special arrangements for the religious instruction of Jain or Sikh students from funds provided for this purpose.

5. The Governor-General of India for the time being shall be the Lord Rector of the University ; and such persons, as may be specified in the Statutes, shall be the Patrons and Vice-Patrons thereof.

6. (1) The Lieutenant-Governor for the time being of the United Provinces of Agra and Oudh shall be the Visitor of the University.

(2) The Visitor shall have the right of inspecting the University and its Colleges generally, and for the purpose of seeing that the proceedings of the University are in conformity with this Act and the Statutes and Regulations. The Visitor may, by order in writing, annul any such proceeding which is not in conformity with this Act and the Statutes and Regulations ;

Provided that, before making any such order, he shall call upon the University to show cause why such an order should not be made, and if any cause is shown within a reasonable time, shall consider the same.

**7.** The following shall be the authorities and officers of the University:—

- I.—The Chancellor,
- II.—The Pro-Chancellor,
- III.—The Vice-Chancellor,
- IV.—The Pro-Vice-Chancellor,
- V.—The Court,
- VI.—The Council,
- VII.—The Senate,
- VIII.—The Syndicate,
- IX.—The Faculties and their Deans,
- X.—The Registrar,
- XI.—The Treasurer, and
- XII.—Such other authorities and officers as may be provided for by the Statutes.

**8.** Subject to the provisions of this Act, the powers and duties of the officers of the University, the term for office and filling up of casual vacancies, which they shall hold office and the filling up of casual vacancies in such offices, shall be provided for by the Statutes.

**9. (1)** The Court shall be the supreme governing body of the University in administrative matters, and shall have power to review the acts of the Senate (save when the Senate has acted in accordance with powers conferred on it under this Act, the Statutes or the Regulations), and shall exercise all the powers of the University not otherwise provided for by this Act or the Statutes.

**(2)** Save in the case of the first Court, no person not being a Hindu shall become, or be appointed a member of the Court.

**10. (1)** The Council shall be the executive body of the Court, and shall, in addition to *ex-officio* members, consist of not more than thirty elected members.

Provided that five members, other than *ex-officio* members, shall be members of the Senate elected by the Senate.

**(2)** The Council shall exercise such powers and perform such duties as may be vested in it by the Statutes.

**11. (1)** The Senate shall be the academic body of the University and, subject to the Act, the Statutes and Regulations, shall have entire charge of the organization of instruction in the University and the Colleges, the courses of study and the examination and discipline of students and the conferment of ordinary and honorary degrees.

**(2)** The Senate shall ordinarily consist of not less than fifty members.

**12. (1)** The Syndicate shall be the executive body of the Senate, and shall consist of seventeen members;

Provided that ten at least of the members of the Syndicate, other than *ex-officio* members, shall be University Professors or Principals or Professors of Colleges.

**(2)** The Syndicate shall exercise such powers and perform such duties as may be vested in it by the Statutes.

**13. (1)** The accounts of the University shall, once at least in every year and at intervals of not more than fifteen months, be audited by Auditors appointed by the Court;

Provided that no person shall be appointed an Auditor in the exercise of this power, unless he is qualified in accordance with the provisions of the

VII of  
1913. Indian Companies Act, 1913, to audit accounts of companies under that Act.

(2) The accounts, when audited, shall be published in the Gazette of India, and a copy of the accounts, together with the Auditor's report, shall be submitted to the Visitor.

14. The University shall invest, and keep invested, Permanent reserve in securities in which trust funds to cover recurring may be invested, in accordance charges, with the provisions of the law relating to trusts in British India, a sum of fifty lakhs of rupees as a permanent endowment to meet the recurring charges of the University other than charges in respect of scholarships, prizes and rewards;

Provided that --

XIII of  
1886. (1) any Government securities, as defined by the Indian Securities Act, 1886, which may be held by the University shall, for the purposes of this Section, be reckoned at their face-value ; and

(2) the aforesaid sum of fifty lakhs shall be reduced by such sum as, at the commencement of this Act, the Governor-General in Council shall, by order in writing, declare to be the total capitalised value, for the purposes of this Section,--

(a) of all permanent recurring grants of money which have been made to the University by any Indian Prince or Chief ; and

(b) of the total income accruing from immoveable property which has been transferred to the University.

15. (1) The Central Hindu College, Benares, shall, from such date as the Governor-General in Council may, by notification in the Gazette of India, appoint in this behalf, be deemed to be a College maintained by the University, and the University

may found and maintain other Colleges and institutions in Benares for the purposes of carrying out instruction and research.

(2) With the approval of the Senate and the sanction of the Visitor, and subject to the Statutes and Regulations, the University may admit Colleges and institutions in Benares to such privileges of the University, subject to such conditions, as it thinks fit.

16. The degrees, diplomas, certificates and other academic distinctions granted by the University, shall be recognized by the Government to the same extent and in the same manner as the corresponding degrees, diplomas, certificates and other academic distinctions granted by any other University incorporated by an Act of the Governor-General in Council.

17. (1) Subject to the provisions of this Act, the Statutes may provide for any or all of the following matters, namely :-

- (a) the constitution, powers and duties of the Court, the Council, the Senate, the Syndicate, and such other bodies, as it may be deemed necessary to constitute from time to time ;
- (b) the election and continuance in office of the members of the said bodies, including the continuance in office of the first members and the filling of vacancies of members, and all other matters relative to those bodies for which it may be necessary or desirable to provide ;
- (c) the appointment, powers and duties of the necessary officers of the University ;
- (d) the instruction of Hindu students in Hindu religion ; and

(e) all other matters relating to the administration of the University.

(2) The first Statutes shall be those set out in Schedule I.

(3) The Court may, from time to time, make new or additional Statutes, or may amend or repeal the Statutes.

(4) The Council shall have power to draft, and propose to the Court, Statutes to be made by the Court, and it shall be the duty of the Court to consider the same.

(5) All new Statutes or additions to the Statutes or amendments or repeals to Statutes, other than Statutes providing for the instruction of Hindu students in Hindu religion, shall require the previous approval of the Visitor, who may sanction, disallow, or remit for further consideration :

Provided that no Statute making a change in the constitution of the Court, the Council, the Senate or the Syndicate, as provided for in the first Statutes, shall be made without the previous sanction of the Governor-General in Council.

18. (1) Subject to the provisions of this Act and the Statutes, the Regulations may provide for any or all of the following matters, namely:—

- (a) the payment of fees to the University and their amount ;
- (b) the admission of students to the University and their examination ;
- (c) the tenure of office and terms and manner of appointment and the duties of the examiners and examining boards ;
- (d) the discipline to be enforced in regard to the graduates and under-graduates ;
- (e) the degrees, diplomas, certificates and other academic distinctions to be awarded by

the University, the qualifications for the same, and the means to be taken relating to the granting and obtaining of the same ;

(f) the withdrawal of degrees, diplomas, certificates and other academic distinctions ;

(g) the removal from membership of the University of graduates and under-graduates ; and

(h) all such other subjects as are required or authorised by the Act or Statutes to be prescribed by means of Regulations.

(2) The first Regulations shall be framed as directed by the Governor-General in Council, and shall receive his previous approval.

(3) The Senate, from time to time, may make new or additional Regulations, or amend or repeal Regulations.

(4) The Syndicate shall have power to draft, and propose to the Senate, Regulations to be made by the Senate, and it shall be the duty of the Senate to consider the same.

(5) All new Regulations or additions to the Regulations, or amendments or repeals to Regulations, shall require the previous approval of the Visitor, who may sanction, disallow or remit for further consideration :

Provided that no Regulation making a change in the first Regulations as to the admission of students to the University, shall be made without the previous sanction of the Governor-General in Council.

19. (1) If, at any time, the Governor-General in Council is of opinion that special reasons exist which make the removal of any member of the teaching staff desirable in the interest of the

Emergency powers  
of the Governor-  
General in Council.



University, or that, as a special measure, the appointment of a certain examiner or examiners to report to him is desirable to maintain the standard of University examinations, or that the scale of staff of the University is inadequate, or that in any other respect the affairs of the University are not managed in the furtherance of the objects and purposes of the University or in accordance with this Act and the Statutes and Regulations, he may indicate to the Council any matter in regard to which he desires explanation, and call upon that body to offer such explanation as it may desire to offer, with any proposals which it may desire to make, within such time as he may prescribe.

(2) If the Council fails to offer any explanation within the time prescribed, or offers an explanation or makes proposals which, in the opinion of the Governor-General in Council, is or are unsatisfactory, the Governor-General in Council may issue such instructions, as appear to him to be necessary and desirable in the circumstances of the case, and the Court shall give effect to such instructions.

**20.** (1) From the commencement of this Act, the Hindu University Society shall be dissolved, and all property, moveable and immoveable, and all rights, powers and privileges of the Hindu University Society which, immediately before the commencement of this Act, belonged to, or were vested in, the said Society, shall vest in the University, and shall be applied to the objects and purposes for which the University is incorporated.

(2) From the commencement of this Act, all debts and liabilities of the said Society shall be transferred and attached to the University, and shall thereafter be discharged and satisfied by the University.

(3) Any will, deed or other document, whether made or executed before or after the commencement of this Act, which contains any bequest, gift or trust in favour of the Central Hindu College or the said Society, shall, on the commencement of this Act, be construed as if the University were therein named, instead of the said College or Society.

## SCHEDULE

### FIRST STATUTES OF THE UNIVERSITY.

[See Sections 3 and 17 (2).]

Definitions.

1. (1) In these Statutes—

“The Act” means the Benares Hindu University Act, 1915.

(2) All words and expressions used herein and defined in the Act shall be deemed to have the meanings respectively attributed to them by the Act.

2. (1) The following persons shall be members of the University, namely :—

(i) The officers of the University.

(ii) The members of the University authorities.

(iii) The members of the teaching staff.

(iv) The Graduates.

(v) The Under-graduates.

(2) Membership of the University shall continue so long only as one at least of the qualifications above enumerated shall continue to be possessed by the individual member.

3. (1) The following persons shall be the Patrons and Vice-Patrons of the University, namely :—

(i) Heads of local administrations in British India, other than the Lieutenant-Governor

of the United Provinces of Agra and Oudh ;

such Indian Princes and Chiefs as the Lord Rector may, of his own motion, or on the recommendation of the Court, from time to time, appoint.

(2) The Lord Rector may, on his own motion, or on the recommendation of the Court, appoint such persons, as he may think fit, to be Vice-Patrons of the University.

4. (1) The successors to the first Chancellor shall be elected by the Court.

(2) The Chancellor shall hold office for three years.

5. (1) The Chancellor shall, by virtue of his Powers of the office, be the head of the University.

(2) The Chancellor shall, if present, preside at the Convocation of the University for conferring degrees, and at all other meetings of the Court.

(3) The Chancellor may, on the recommendation of the Senate, appoint Rectors, being persons of eminent position or attainment.

6. (1) The successors to the first Pro-Chancellor shall be elected by the Court from among its own members.

(2) The Pro-Chancellor shall hold office for one year.

(3) Casual vacancies in the office of the Pro-Chancellor shall be filled up by the Chancellor on the recommendation of the Council. The person so appointed shall hold office till the next annual election.

7. The Pro-Chancellor may, in the absence of the Chancellor or pending a vacancy in the office of Chancellor, exercise the functions of the Chancellor, except

the conferring of degrees, and preside at any meetings of the Court.

8. (1) The successors to the first Vice-Chancellor shall be elected by the Court from among its own members. Such appointment shall be subject to approval by the Visitor.

(2) The Vice-Chancellor shall hold office for three years.

(3) Casual vacancies in the office of the Vice-Chancellor shall be filled up by election by the Court, subject to approval by the Visitor. Until the election of a new Vice-Chancellor, the Pro-Vice-Chancellor shall perform the duties of the Vice-Chancellor.

9. (1) The Vice-Chancellor shall take rank in the University next to the Chancellor and the Pro-Chancellor, and shall be *ex-officio* Chairman of the Council, the Senate and the Syndicate. He shall be the principal Executive and Academic Officer of the University, and shall, in the absence of the Chancellor, preside at the Convocation and confer degrees.

(2) It shall be the duty of the Vice-Chancellor to see that the Act, the Statutes and the Regulations are faithfully observed.

(3) The Vice-Chancellor shall have power to convene meetings of the Court, the Council, the Senate and the Syndicate, and to perform all such acts as may be necessary to carry out or further the provisions of the Act, the Statutes and the Regulations.

(4) If any emergency arises which, in the opinion of the Vice-Chancellor, requires that immediate action should be taken, the Vice-Chancellor shall take such action as he deems necessary, and shall

report the fact to the authority which, in the ordinary course, would have dealt with the matter.

**10. (1)** The Pro-Vice-Chancellor shall be elected by the Court. The appointment of the Pro-Vice-Chancellor shall be subject to approval by the Visitor.

(2) He shall hold office for such period and under such conditions as shall, from time to time, be determined by the Court.

(3) Casual vacancies in the office of the Pro-Vice-Chancellor shall be filled up by the Vice-Chancellor, with the approval of the Chancellor and the Visitor. The person so appointed shall hold office till the next meeting of the Court.

**11.** The Pro-Vice-Chancellor shall be *ex-officio* Secretary of the Court and the Council. He shall be the executive assistant of the Vice-Chancellor in all matters affecting the discipline of the graduates and under-graduates.

**12. (1)** The Registrar shall be a whole-time paid officer of the University, and shall be appointed by the Council. He shall be *ex-officio* Secretary of the Senate and the Syndicate. He shall hold office for a term of five years.

(2) The Registrar may be a member of the Senate, but shall not be a member of the Syndicate.

(3) It shall be the duty of the Registrar—

(a) to be the custodian of the records, Common Seal and such other property of the University as the Syndicate shall commit to his charge;

(b) to act as Secretary to the Senate and the Syndicate, and to attend, as far as possible, all meetings of the Senate, Syndicate, Faculties, and any Committees appointed by

the Senate, the Syndicate, or the Faculties, and to keep minutes thereof;

- (c) to conduct the official correspondence of the Senate and the Syndicate;
- (d) to issue all notices convening meetings of the Senate, Syndicate, Faculties, Boards of Studies, Boards of Examiners, and of any Committees appointed by the Senate, the Syndicate, the Faculties or any of the Boards;
- (e) to arrange for, and superintend the examinations of the University at Benares; and
- (f) to perform such other work as may, from time to time, be prescribed by the Syndicate.

**13. (1)** The Treasurer shall be appointed by the Court. He shall hold office for the term of one year.

(2) Casual vacancies in the office of the Treasurer shall be filled up by election by the Council. The person so appointed shall hold office for the unexpired period of office of the person in whose place he is elected.

(3) The receipt of the Treasurer for any money payable to the University shall be sufficient discharge for the same.

**14. (1)** Subject to the provisions of the Act, and save as hereinafter provided in this Statute, the Court shall consist of the following persons, namely:—

*Class I.—Ex-officio Members*—The Chancellor, the Pro-Chancellor, the Vice-Chancellor, and the Pro-Vice-Chancellor for the time being.

*Class II.—Donors and their representatives:—*

- (a) Every Indian Prince or Chief, contributing a donation of three lakhs of rupees or upwards, or transferring property of the like value, shall be a life-member from the date of the receipt of the donation or of the

- transfer, and, after his decease, his successor for the time being holding his position as such Prince or Chief, shall be a life-member.
- (b) Every person contributing to the University a donation of one lakh of rupees or upwards, or transferring property of the like value, shall be a life-member from the date of the receipt of the donation or of the transfer.
- (c) Every person contributing to the University a donation of Rs. 10,000 or upwards, or transferring property of the like value, shall be a member for a period of ten years from the date of the receipt of his donation or of the transfer.
- (d) Every person who is a life-member in virtue of Clause (a) may, from time to time, nominate one member. The member so nominated shall continue in office for such period as the nominator may specify to the Registrar, provided that his membership shall determine on the death of the nominator.
- (e) Every person who is a life-member in virtue of Clause (b) may, by notice in writing to the Registrar, nominate one member to hold office for a period of five years.
- (f) Every donor who makes a bequest of Rs. 10,000 or upwards, or of property of the like value may, by or under his will, nominate one person who shall be a member for a period of five years from the receipt of the bequest.
- (g) Every Indian Prince or Chief who makes a permanent annual grant of money to the University shall, subject to the provisions of Clause (j), have the same rights as to membership of, and representation on, the Court as if he had been a donor of such sum as

represents the capital value ascertained at a rate of interest of 3½ per cent. of such annual grant.

- (h) Every other grantor to the University of any annual grant of money, the payment of which is secured by mortgage of immovable property affording sufficient security for such grant within the provisions of the *Explanation* to Section 66 of the Transfer of Property Act, 1882, and effected by duly executed instrument in a form approved by the Council, shall, subject to the provisions of Clause (j), have the same rights as to membership of, and representation on, the Court as if he had been a donor of a sum calculated in the manner prescribed in Clause (g).

IV of 1882

- (i) The amounts of donations specified in Clauses (a), (b), (c), (f) and in Class III (b) may, for the purpose of qualifying the donors within those provisions, be made up partly of money or of capitalised grants, as provided in Clauses (g) and (h) or of property, or partly of any two or more of these.
- (j) When an annual grant is not fully paid up or falls in arrears, the grantor shall not be entitled to exercise any of the privileges conferred on him by any of the foregoing Clauses of this Statute, unless and until the said arrears are paid up.

**Class III.—Elected Members:—**

- (a) Ten persons to be elected by the registered graduates of the University from such date as the Court may fix.
- (b) Thirty persons to be elected by registered donors of Rs. 500 or upwards:

Provided that, whenever the number of



such donors falls below fifty, there shall be no election until the number of such donors again attains or exceeds fifty.

(c) Ten persons to be elected by the Senate.

(d) Fifteen representatives of Hindu religion and Samskrit learning to be elected by the Court.

(e) Ten persons to be elected by the Court to represent Jain and Sikh communities.

(f) Ten persons to be elected by the Court to represent the learned professions.

(g) Such other persons, not exceeding twenty in number, as may be elected by the Court.

(2) The foregoing provisions of this Statute shall, as far as may be, be applicable to the first Court :

Provided that, in the case of the first Court, the ten persons specified in Group (e) of Class III shall be appointed by the Vice-Chancellor, with the approval of the Governor-General in Council.

(3) When any electoral body, entitled to elect a member or members, fails to do so within the time prescribed by the Court, the Court may appoint any qualified person of the Class from which such electoral body was entitled to elect.

(4) Save when otherwise expressly provided, members shall hold office for five years :

Provided that, as nearly as may be, one-fifth of the total number of the members of the first Court in each of the Groups of Class III shall retire by ballot at the end of each year for the first four years.

(5) All casual vacancies among the appointed or elected members shall be filled, as soon as conveniently may be, by the person or body who appointed or elected the member whose place has become vacant, and the person appointed or elected to a casual vacancy shall be a member for the residue of

the term for which the person, in whose place he is appointed or elected, was a member.

**15.** The Court shall exercise control over the Senate through the Council and not otherwise, and over the Faculties through the Council and Senate and not otherwise, and over the Council by means of Statutes and Resolutions passed at a meeting of the Court and not otherwise.

**16.** (1) As soon as may be after the commencement of the Act, the first Court shall assemble at such place and time, as the Chancellor may direct, in order to make the necessary appointments and elections for the purpose of the Act and Statutes.

(2) An Annual Meeting of the Court shall be held during the month of October in each year, unless some other month be fixed by resolution at a previous Annual General Meeting, on such day and at such hour as shall be appointed by the Council. And at such yearly meeting, a report of the proceedings of the Council and of the University, together with a statement of the receipts and expenditure, and the balance-sheet as audited, shall be presented by the Council to such meeting, and any vacancies among the officers of the University or among the members of the Court or Council which ought to be filled up by the Court, shall be filled up.

(3) A copy of the statement of receipts and expenditure and of the balance-sheet referred to in Clause (2) shall be sent to every member of the Court at least seven days before the date of the Annual Meeting, and shall be open to the inspection of all members of the Court and Senate at the office of the University during the year following such Annual Meeting, at such reasonable hours and under such conditions as the Council may determine.

(4) Twenty members of the Court shall form a *quorum*.

(5) Special General Meetings of the Court may be convened by the Council at any time.

17. (1) The Council shall consist of the following The Council. " persons, namely :--

(i) The Vice-Chancellor and the Pro-Vice-Chancellor for the time being.

(ii) Not more than thirty elected members, of whom five shall be members of the Senate elected by the Senate, and the remainder members of the Court elected by the Court.

(2) Not less than five of the members to be elected by the Court shall be residents of places outside the United Provinces of Agra and Oudh.

(3) At the first election of members of the Council by the Court, it shall proceed in the first place to elect twenty members. The Court shall, as soon as the result of the election is declared, proceed to determine the Province, or Provinces or States, from among the residents of which the remaining five members are to be elected, and assign to each Province or State the number of member or members to be elected.

(4) At each subsequent election, as nearly as may be, four-fifths of the vacancies shall be first filled up. The remaining one-fifth of the vacancies shall then be filled up to secure representation of Provinces and States, on the same lines *mutatis mutandis* as provided in Sub-section (3).

(5) The elected members of the Council shall hold office for the term of three years ;

Provided that, at the First Annual Meeting of the Court, and at the Second Annual Meeting of the Court, as nearly as may be, one-third of the first elected members shall retire by ballot.

(6) All casual vacancies among elected members may be filled up by the body which elected the member whose place has become vacant.

(7) Seven members of the Council shall form a *quorum*.

18. (1) The Council shall, subject to the control of the Court, have the management and administration of the whole revenue and property of the University and the conduct of all administrative affairs of the University not otherwise provided for.

Powers of the Council.

(2) Subject to the Act, the Statutes and any Regulations made in pursuance thereof, the Council shall, in addition to all other powers vested in it, have the following powers, namely :--

- (i) To appoint, from time to time, Principals of Colleges and such University Professors, Assistant Professors, Readers, Lecturers and other members of the teaching staff as may be necessary, on the recommendation of the Board of Appointments.
- (ii) In the case of other appointments, to delegate, subject to the general control of the Council, the power of appointment to such authority or authorities as the Council may, from time to time, by resolution, either generally or specially, direct.
- (iii) To manage and regulate the finances, accounts, investments, property, business and all other administrative affairs of the University and, for that purpose, to appoint such agents as it may think fit.
- (iv) To invest any moneys belonging to the University, including any unapplied income in such stocks, funds, shares, or securities as it shall, from time to time, think fit, or in the

purchase of immoveable property in India, with the like power of varying such investments from time to time.

- (v) To transfer or accept transfers of any moveable or immoveable property on behalf of the University.
- (vi) To provide the buildings, premises, furniture and apparatus, and other means needed for carrying on the work of the University.
- (vii) To enter into, vary, carry out, and cancel contracts on behalf of the University.
- (viii) To entertain, adjudicate upon, and, if thought fit, redress any grievances of the officers of the University, the Professors, the Teaching Staff, the Graduates, Under-graduates and the University servants, who may, for any reason, feel aggrieved, otherwise than by an act of the Court :

Provided that nothing in this provision shall be deemed to confer on the Council any power to interfere in any matter of discipline in regard to Graduates and Under-graduates.

- (ix) To maintain a register of donors to the University.
- (x) To select a Seal for the University, and provide for the custody and use of the Seal.

**19. (1)** The Senate shall, save as hereinafter provided in this Statute, ordinarily consist of not less than fifty mem-

bers, of whom not less than three-fourths shall be Hindus, and shall include the following persons, namely:—

*Class I.—Ex-officio members.*

- (a) The Chancellor, the Pro-Chancellor, the Vice-Chancellor and the Pro-Vice-Chancellor for the time being.
- (b) The University Professors.
- (c) The Principals or Heads of Colleges.

*Class II.—Elected members.*

- (a) Five members to be elected by the Court.
- (b) Five members to be elected by the registered graduates of the University from such date as the Court may fix.
- (c) Five representatives of Hindu religion and Sanskrit learning to be elected by the Senate.
- (d) Ten representatives to be elected by the Senate from persons engaged in the teaching work of the University or its Colleges.
- (e) Should the Vice-Chancellor declare that there is a deficiency in the number of members required in any Faculty or Faculties, then five or less persons elected by the Senate, eminent in the subject or subjects of that Faculty or those Faculties.

*Class III.—Nominated members.*

- (a) Five members to be nominated by the Visitor.
- (2) The foregoing provisions of this Statute shall as far as may be, be applicable to the first Senate.
- (3) The elected and nominated members of the Senate shall hold office for five years ;

Provided that, as nearly as may be, one-fifth of the total number of the members of the first Senate shown in each of the Groups of Class II and of those shown in Class III shall retire by ballot at the end of each year for the first four years.

(4) All casual vacancies among elected members may be filled up by the body which elected the member whose place has become vacant.

(5) Fifteen members of the Senate shall form a *quorum*.\*

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\* Modified by Statute 61, *infra*.

**20. (1)** The Senate shall be the academic body of the University and, subject to the Powers of the Senate, the Act, the Statutes and Regulations of the University, shall have entire charge of the organization of instruction, the courses of study and the examination and discipline of students (save so far as matters of discipline rest with the Pro-Vice-Chancellor and the Heads of Colleges) and the conferment of ordinary and honorary degrees.

(2) Subject to the Act and the Statutes and any Regulations made in pursuance thereof, the Senate shall, in addition to all other powers vested in it, have the following powers, namely :—

- (i) To report on any matter referred to or delegated to them by the Court or the Council.
- (ii) To discuss, and declare an opinion on, any matter whatsoever relating to the University.
- (iii) To make recommendations to the Council or to the Board of Appointments as to the removal of any Professor or Teacher of the University or of its Colleges, or as to the appointment of additional Professors or Teachers for the University or its Colleges.
- (iv) To formulate and modify or revise schemes for the organization of Faculties and to assign to such Faculties their respective subjects and also to report to the Council as to the expediency of the abolition, combination, or sub-division of any Faculty.
- (v) To fix, subject to any conditions made by the founders which are accepted by the Court, the times and mode and conditions of competition for Fellowships, Scholarships, and other Prizes, and to award the same.
- (vi) To promote research within the University

and to require, from time to time, reports on such research.

(vii) To maintain a register of graduates.

**21.** (1) The Syndicate shall be the executive body of the Senate, and shall consist of the Vice-Chancellor, the Pro-Vice-Chancellor and fifteen persons elected by the Senate, of whom not less than ten shall be University Professors or Principals or Professors of Colleges.

(2) The elected members of the Syndicate shall hold office for three years ;

Provided that, as nearly as may be, one-third of the elected members of the first Syndicate shall retire by ballot at the end of each year, for the first two years.

(3) All casual vacancies among elected members may be filled up by the Senate.

(4) Five members of the Syndicate shall be a *quorum*.

**22.** It shall be the duty of the Syndicate, subject to the revision and control of the Senate,—

Duties of the Syndicate.

- (i) to order examinations in conformity with the Regulations, and to fix dates for holding them ;
- (ii) to appoint Examiners, and, if necessary, to remove them, and, subject to the approval of the Council, to fix their fees, emoluments and travelling and other allowances, and to appoint Boards of Examiners and Moderators ;
- (iii) to appoint, whenever necessary, Inspectors or Boards of Inspectors for inspecting Colleges applying for admission to the privileges of the University ;
- (iv) to declare the results of the various University examinations, and to recommend for



- degrees, honours, diplomas, licenses, titles and marks of honour ;
- (v) to award stipends, scholarships, medals, prizes and other rewards, in conformity with the Regulations and the conditions prescribed for their award ;
  - (vi) to consider and make such reports, or recommend such action, as may be deemed necessary, on proposals or motions brought forward by the members of the Senate and Faculties, for consideration by the Senate ;
  - (vii) to publish lists of prescribed, or recommended, text-books and to publish statements of the prescribed courses of study ;
  - (viii) to prepare such forms and registers as are, from time to time, prescribed by the Regulations ; and, generally,
  - (ix) to perform all such duties and to do all such acts, as may be necessary for the proper carrying out of the provisions of the Act, and the Statutes and Regulations or the resolutions of the Senate.

**23.** (1) The University shall include the Faculties of (1) Oriental Learning, (2) Theology, (3) Arts, (4) Science, Pure and Applied, (5) Law, and, as soon as the Visitor is satisfied that sufficient funds are available for the purpose, of (6) Technology, (7) Commerce, (8) Medicine and Surgery, (9) Agriculture, and other Faculties.

(2) The Senate shall annually assign its members to the different Faculties.

(3) The method of assignment of members to the Faculties, the meetings of the Faculties, and their power of co-opting additional members shall be provided for by Regulations ;

Provided that the members assigned to the Faculty of Theology shall all be Hindus.

**24.** (1) The Faculties shall have such powers, and shall perform such duties, as may be assigned to them by the Statutes and the Regulations, and shall, from time to time, appoint such and so many Boards of Studies, in different branches of knowledge as may be prescribed by the Regulations. They shall also consider and make such recommendations to the Senate on any question pertaining to their respective sphere of work as may appear to them necessary, or on any matter referred to them by the Senate.

(2) Five members, in the case of the Faculty of Arts, and three members, in the case of the other Faculties, shall constitute a *quorum*.

**25.** Convocations of the University for the conferring of degrees, or for other purposes, shall be held in a manner to be prescribed by Regulations.

**26.** The Court, Council, Senate, Syndicate and the Faculties may, from time to time, appoint such and so many standing and special Committees or Boards as may seem to them fit, and may, if they think fit, place on them persons who are not members of the appointing bodies. Such Committees may deal with any subject delegated to them, subject to subsequent confirmation by the appointing body.

**27.** (1) The Board of Appointments shall consist of—

- (i) The Vice-Chancellor.
- (ii) The Pro-Vice-Chancellor.
- (iii) Two members to be elected by the Court.
- (iv) Two members to be elected by the Council.
- (v) Two members to be elected by the Senate.
- (vi) Two members to be elected by the Syndicate.\*

See proviso added by Statute 62, *infra*.

(2) The elected members shall hold office for the term of two years. One member from each electing body, to be determined by ballot, shall retire at the end of the first year.

(3) The Vice-Chancellor shall preside at the meetings of this Board or, in his absence, the Pro-Vice-Chancellor.

(4) The meetings of the Board shall be convened by the Vice-Chancellor or Pro-Vice-Chancellor, or, when so directed by the Syndicate, by the Registrar.

(5) The Board shall consider and submit recommendations as to all appointments referred to it.

**28.** No act or resolution of the Court, the Council, the Senate, the Syndicate or the Faculties or any other authority shall be invalid by reason only of any vacancy in the body doing or passing it or by reason of any want of qualification by, or invalidity in, the election or appointment of any *de-facto* member of the body, whether present or absent.

**29.** Where, by the Statutes or Regulations, no provision is made for a President or Chairman to preside over a meeting of any University authority, Board or Committee, or when the President or Chairman so provided for is absent, the members present shall elect one of their number to preside at the meeting.

**30.** Every officer of the University and every member of any University authority, whose term of office or of membership has expired, shall be eligible for re-appointment or re-election, as the case may be.

**31.** Any member of the Court, the Council, the Senate or the Syndicate or any other University authority may resign by letter addressed to the Secretary in the

case of the Court, and to the Registrar in all other cases.

**32.** A member of the Court or the Senate may be removed from office on conviction by a Court of Law of what, in the opinion of the Court or the Senate, as the case may be, is a serious offence involving moral delinquency ;

Removal.  
Provided that a Resolution for the removal of any such member is approved by not less than two-thirds of the members present at the meeting of the Court or the Senate, as the case may be, at which such a Resolution is proposed :

And provided further that such a resolution is confirmed by a like majority at a subsequent meeting of the Court or Senate, as the case may be.

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*Statutes made by the Court under Sub-section (3) of Section 17 of the Act<sup>1</sup>.*

**33.** Notices of the Annual General Meeting shall be issued by the Secretary, at least 30 days before the date of the meeting, with an Agenda paper and, no business, not arising out of matters noted or mentioned in such Agenda paper, shall be considered, unless the consent of at least two-thirds of the members of the Court present at the meeting be obtained thereto.

**34.** Every member who intends to bring forward any special business at the Annual General Meeting, or to propose any person for election as Chancellor, Pro-Chancellor, Treasurer, or Auditor,

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\* Received the approval of the Visitor, under Sub-section (5) of Section 17 of the Act, on the 12th and the 30th August, 1916.

or as a member of the Court or of the Council, shall give notice of such business, or of the name of the person to be proposed, to the Secretary, at least 20 days before the day appointed for such meeting. Every member who intends to propose an amendment shall give notice thereof to the Secretary ten days before the date fixed for the meeting.

**35.** Fourteen days' notice of any Special General Meeting, stating generally the nature of the business to be transacted, shall be sent to each member of the Court, and no such meeting shall be competent to transact any business other than that mentioned in the notice or directly arising out of it.

Notice of Special General Meetings and business to be transacted.

**36.** The procedure at meetings shall be in accordance with rules to be made by the Court in that behalf.

**37.** Each Faculty shall, at its first meeting, elect one of its members as the Dean of the Faculty, who shall hold office until the appointment of a Dean for the next following year at the next Annual Meeting of the Faculty.

Deans of the Faculties.

**38.** In the event of the office of Dean being vacated in the course of the year, the Faculty shall elect a new Dean within one month of the occurrence of the vacancy, or as soon thereafter as may be practicable.

Vacancy in the office of Dean of Faculty.

**39.** Contracts made by or on behalf of the University shall be validly made, and binding on the University if made, as follows:--

(a) Any contract which is made between private

Contracts.

persons would by law be required to be in writing and, if required by the law in force in British India to be registered, may be similarly made on behalf of the University in writing under its Common Seal and registered, and such contract may in the same manner be varied or discharged.

- (b) Any contract which if made between private persons would by law be required to be in writing and signed by the parties to be charged therewith, may be made on behalf of the University in writing signed by any person acting under the express or implied authority of the Council, and such contract may in the same manner be varied or discharged.
- (c) Any contract which if made between private persons would by law be valid, although made verbally only and not reduced into writing, may be made either in writing or verbally on behalf of the University by any person acting under the express or implied authority of the Council, and such contract may be in the same way varied or discharged;

Provided always that no contract exceeding Rs. 500 in amount or value shall be made except in writing.

- (d) The Council shall from time to time appoint such person or persons as it may think proper, either by office or by name, to enter into, execute and sign contracts for and on behalf of the University, and to present them for registration and to register the same according to the law in force for the time being.

**40.** At the first meeting of the Court convened under the orders of the Chancellor; under Statute 16, the Vice-Chancellor shall lay on the table a list showing the names and addresses of all the donors who have paid to the Hindu University Society or to the University a donation of Rs. 500 or upwards, or have, where permitted by the Statutes, given property of the said value or more. The list shall be compiled from the accounts kept by the Hindu University Society. Any errors or omissions in the said list may be rectified by an order of the Vice-Chancellor.

**41.** The names and addresses of all persons who have paid or may hereafter pay a sum of Rs. 500 or upwards to the University, shall be entered in the said list, from time to time, by the Secretary of the Court.

**42.** Every person whose name is entered in the said list shall be deemed to be a registered donor within the meaning of the Statutes and entitled to vote at the election.

**43.** Where the donors of a sum of Rs. 500 or upwards, are more persons than one, who constitute a joint Hindu family, or a partnership firm, or a company or corporation, the Secretary shall call upon such donors to elect, within a time to be fixed by him, one of their number to represent and act for them in voting at the election. If such donors fail to elect and notify the name and address of the person so elected by them, within the time specified in the notice, or within such further period of time as may be allowed by the Secretary, or are unable to agree as to the person who should represent them for the purpose of voting at the election, the Secretary

shall lay the matter for orders before the Vice-Chancellor, who may nominate any one of their number to represent them at the election for the purpose of voting. The orders of the Vice-Chancellor shall be final. The name of the person so elected or nominated to represent such donors, shall be entered in the column of remarks against the names of such donors and, for purposes of serving all notices of elections, of making nominations of persons to be elected and for voting at the election, the person so noted as the representative of such donors, shall be deemed to be the person entitled to act as one of the electors.

**44.** Where the elector is an Indian Prince or Chief, not invested with the powers of administration of the affairs of his State, the Council of Regency or other duly constituted authority in charge of the administration of such State, shall be entitled to exercise the right of an elector, so long as the Indian Prince or Chief is not so invested.

**45.** Where the donor is a minor or a person suffering from a disability, or a ward of the court, the legal guardian of such person shall be entitled to act for him at such election as a voter, so long as the minority or disability continues or so long as he is a ward of the court. Where the same person is not the guardian of the person and property of a minor, the guardian of the property shall be deemed to be the guardian within the meaning of this Statute.

**46.** Whenever there are one or more vacancies in the Court for election, the Secretary shall cause notice to be issued showing the number of such vacancies and specifying a time within which



nominations to fill up the vacancy may be made. Such notice shall be posted to the registered address of each elector whose name is entered in the said list. The time specified for depositing the nomination papers with the Secretary shall not be less than 30 days from the date on which such notice is posted.

**47.** Each elector shall nominate such or so many persons as there are vacancies to fill up, and shall deliver in the Secretary's office such nomination paper in a sealed cover, on or before the said date, or may send his nomination paper in a sealed cover by registered post in time to reach the Secretary on or before the said date.

**48.** Such nomination papers shall be signed by the elector, who shall give the name or names of the person or persons proposed by him for election together with his or their qualifications. A person unable to sign his name may put his seal or mark instead. The seal or mark shall be made in the presence of and witnessed by not less than two witnesses who shall attest the same. In such case, as also in the case of *parda-nashin* ladies, their signatures or seal or mark shall be authenticated by at least two such witnesses before a magistrate or judicial officer or other person entitled to attest affidavits for use in a court of justice.

**49.** The Secretary shall provide for the custody of such nomination papers, which shall be kept in the sealed covers unopened until the day after the last day fixed for receiving such nomination papers. On the said day, the Secretary shall open the said covers and scrutinize them.

**50.** The Secretary shall then prepare a list of persons who have been duly nominated and print his or their name or names and address or addresses together with his or their qualifications on a voting paper. One such voting paper shall be posted under registered cover to the name and registered address of each elector. The voting paper shall state the time and date on or before which the voting paper must be delivered in a sealed cover to the Secretary or posted to him in a registered cover so as to reach him on or before the date and time fixed for the delivery of such paper.

**51.** The elector shall put a cross mark × against the name of the person or persons for whom he votes and strike out the names of the other persons for whom he does not vote. Such voting paper shall be signed by the elector and the provisions of Statute 48 shall apply to the case of persons unable to sign their own names and to the case of *parda-nashin* ladies.

**52.** Each elector may vote for the election of as many persons as there are vacancies, but he shall not be entitled to give more than one vote to each person.

**53.** The voting papers shall be put in sealed covers by the voters which shall be delivered in the Secretary's office on or before the date and time fixed for the delivery of voting papers or posted by registered post so as to reach the Secretary before the said time and the said date.

**54.** The voting papers shall be opened and scrutinized by the Secretary as soon as the time for the delivery of voting papers has expired. Candidates

for election or their agents may be present at such scrutiny. The Secretary shall, prepare a return of the votes obtained by each person nominated.

**55.** The person or persons who have obtained the highest number of votes shall be declared to have been duly elected to fill up the vacancy or vacancies.

Declaration of the result of voting.

**56.** Where two or more persons have obtained an equal number of votes and the vacancies available are less in number, the Secretary shall report the case to the Vice-Chancellor, who shall, on a date and time to be appointed, determine, by drawing lots in such manner as he may consider advisable, which of the aforesaid persons shall be deemed to have been elected.

Election in case of ties.

**57.** All objections to the voting papers, or the decisions of the Secretary on any point, may, at once, be referred by the persons aggrieved to the Vice-Chancellor, whose order in such matters shall be final.

Reference to Vice-Chancellor of objection to voting papers or to decisions of the Secretary.

**58.** The Secretary shall, as may be necessary, prepare and print forms of nomination and voting papers for the use of the electors.

Forms of nomination and voting papers.

**59.** No election shall be deemed to be invalid by reason of the notice under Statute 46 or the nomination paper posted to any elector being not delivered to him, for any reason, by the postal department.

Irregularity in postal delivery.

**60.** The term 'Secretary' in Statutes 33 and 34 and in Statutes 40 to 60 shall mean the Secretary of the Court, or, in his absence or illness, or in case of no person

Definition of "Secretary."

being appointed to hold the said office at any time, such person as the Vice-Chancellor may nominate, for the time being, to perform under these Statutes the duties of the Secretary.

**61.** To add to Sub-section (5) of Statute 19 of Schedule L of the Act, the following proviso:—"Provided that at the first meeting of the Senate and at all other meetings of the Senate held on or before 1st April, 1918, eight members thereof shall form the *quorum*."

**62.** To add to Sub-section (1) of Statute 27 of Schedule I of the Act, the following proviso:—

"Provided that until the first Syndicate is constituted, the two members to be elected by the Syndicate under Sub-clause (vi) shall be elected by the Senate. The members so elected under the proviso shall cease to be members of the Board as soon as the Syndicate has elected the two members under this Sub-clause."

**63.\*** To add the following temporary Statute:—

"Notwithstanding anything to the contrary contained in the Statutes in Schedule I of the Act, the Annual Meeting of the Court, to be held in October 1917, shall be deemed to be the First Annual Meeting of the Court, and all members of the Court and Officers of the University whose term of office would otherwise have expired prior to that date shall continue to hold their respective offices until the close of the Annual Meeting of 1917."

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\* Received the sanction of the Governor-General in Council under Sub-section (5) of Section 17 of the Act, on the 8th September, 1916, *vide* No. 854 (Government of India—Education Department), bearing that date

**64.** Instruction in Hindu religion shall, in the case of Hindu students, be compulsory and shall be confined to them.

Religious instruction compulsory to Hindus.

**65.** The Faculty of Theology shall be in charge of the religious instruction of the Hindu students of the University, and it shall also organize studies in religion and the examinations therein.

Faculty of Theology to organize studies in religion.

**66.** The Faculty shall appoint a Committee to organize and supervise religious worship and instruction in the University hostels. Such Committee shall prescribe the book or books, or selections from recognized religious works to be studied by the students of the University; and shall, subject to the sanction of the Council, appoint such and so many teachers of religion as may be required for the said purpose, and draw up a scheme of studies for the approval of the Faculty. It shall also arrange for recitations from religious works and lectures on religion.

Faculty of Theology to appoint Committee for religious worship and instruction in hostels.

**67.** Students of the Hindu faith shall attend the course of religious instruction, recitations and lectures. A record of such attendance shall be kept, and the Committee shall, from time to time, report the names of students who neglect to attend the said lectures, etc., to the Students' Residence Committee. Failure to attend the said lectures without good cause shall render a student liable to such penalty or penalties as the Students' Residence Committee may think fit to impose.

Attendance at religious lectures, etc.

**68.** The Committee in charge of religious instruction shall consist of seven members professing the Hindu faith, to be elected by the

Constitution of Committee in charge of religious instruction.

Faculty of Theology for a term of three years. The Faculty shall also nominate one of the members as its Convener, who shall be responsible for convening the meeting and for keeping a correct record of the proceedings of the Committee.

**69.** In case of any emergency, when it is not practicable to convene a meeting of the Committee, the Convener shall pass such orders and take such action as may be required, and report the same to the next meeting of the Committee.

**70.** The Committee shall, ordinarily, meet once a month, on such date and at such time as the Convener may appoint. He may also convene such other meetings as may be necessary.

**71.** Instruction in Hindu religion shall be based on the principles and tenets which are accepted by the principal denominations of the Hindu religion. Provision may be made for instruction in the special tenets of such denominations, when required, with the sanction of the Faculty of Theology. Attendance at such courses of instruction will be optional.

**72.** The Council shall provide funds and make such arrangements as may be necessary for the maintenance and management of the Central Hindu School now in existence, and for the expansion and improvement of the same.

**73.** The said School shall comprise the following departments, viz.:—  
Departments of the School.

(a) One for the instruction and training of students up to the standard of the Admission Examination of the University in Arts and Science;

(b) One for the instruction and training of students for the Admission Examination to the Faculties of Oriental Learning and Theology ;

(c) One for the instruction and training of students for the Faculty of Technology (when constituted).

**74.** Provision for instruction in religion for Hindu students shall be made in all departments of the said School.

**75.** Each such department shall be in the charge of a qualified Head or Superintendent acting under the Headmaster, assisted by such and so many subordinate teachers as may be required.

**76.** The management of the School shall be in the hands of the Central Hindu School Board, which shall consist of -

(a) The Chairman of the Board, to be nominated by the Court.

(b) One member to be nominated by each Faculty of the University from among its own members.

(c) Members to be nominated by the Council equal in number to the number nominated under Clause (b).

The Headmaster for the time being will act as the Secretary of this Board.

**77.** The members appointed shall hold office for three years, and shall be eligible for re-appointment.

**78.** The Budget of the School for the year shall be prepared by the said Committee and passed by the Council with such amendment or amendments as may be necessary ; and the accounts shall be annually audited

by an Auditor or Auditors, to be appointed by the Council.

**79.** The Headmaster of the School shall be appointed by the Council, after report from the Board.

**80.** The School shall be under the control and management of the said Board, save and except for such financial and administrative control of the University as is hereinbefore provided.

**81.** The said School and all its buildings, properties, furniture, apparatus and books and accounts shall be the property of the University.



# ***The Regulations of the Benares Hindu University.\****

## **CHAPTER I.**

### **The Senate.**

1. Meetings of the Senate shall be Ordinary, Special, or Extraordinary.

2. The Ordinary Meetings shall be held in October and March of each year, on such dates as the Vice-Chancellor may appoint.

3. The Special Meetings of the Senate shall be such as are convened by the Vice-Chancellor, either of his own motion or at the request of the Syndicate, for the disposal of urgent business.

4. The Extraordinary Meetings of the Senate shall be convened by the Vice-Chancellor, on the written request of any twelve members.

5. Any member who wishes to propose a resolution at an Ordinary Meeting of the Senate, shall forward the terms of the resolution to the Registrar, so as to reach him not later than three weeks before the date fixed for the meeting. When any twelve members forward a written request to the Vice-Chancellor to convene an Extraordinary Meeting of the Senate, they shall at the same time forward the terms of the resolution or resolutions which it is intended to propose, and also the name of the proposer of each resolution.

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\* Framed under Section 18, Sub-section (2) of the Benares Hindu University Act, 1915 (XVI of 1915), as directed by the Governor-General in Council and received his previous approval and published in the Gazette of India, dated the 28th October, 1916, Part I, at page 1631, as Notification No. 960 (Education), dated the 25th October, 1916.

6. The Syndicate shall consider each such resolution, of which notice has been given in accordance with the foregoing Regulation, and shall cause it to be placed on the agenda paper of the meeting at which its discussion is intended by the proposer; provided that the Syndicate may exclude from the agenda paper any proposed resolution, (a) which deals in whole or in part with any decision of the Senate adverse to its terms which has been arrived at in any meeting of the Senate held within one year previous to that at which its discussion is intended, or (b) which is repugnant to the Act and the Statutes.

The Registrar shall inform the proposer in each such case of exclusion, and the Syndicate shall report the fact of exclusion at the meeting at which the discussion of the resolution was intended, or if there be no other business for that meeting, at the next meeting of the Senate.

7. No resolution, proposal, or other matter of business which has not been submitted to the Syndicate shall be brought before the Senate at any meeting, except as provided for in Clause 15.

8. The Registrar shall, not less than 15 days previous to each Ordinary or Extraordinary Meeting of the Senate, issue to each member a notice stating the time and place of meeting; and this notice shall be accompanied by an agenda paper showing the business to be brought before the meeting, and, except as provided for in Clause 15, or by special permission of the Chairman, no resolution, proposal, or other matter of business which is not entered on the agenda paper shall be brought before the meeting; provided that the Syndicate may, for reasons of urgency, bring any business before any meeting of the Senate, without notice being given in the agenda paper.

9. In the case of Special Meetings, the Registrar shall give such previous notice of the time and place of meeting as the circumstances in each case may permit, but, except in regard to this particular, the provisions of Regulation 8 shall apply to such meetings.

10. At any Special Meeting of the Senate, any member may bring forward any amendment without previous notice being given.

11. At the time fixed for a meeting of the Senate, the Vice-Chancellor, or, in his absence the Pro-Vice-Chancellor, shall take the Chair and shall ascertain whether a quorum is present or not. If a quorum be present, he shall declare the meeting constituted, and shall proceed with the business of the meeting. If a quorum be not present, he shall wait for fifteen minutes after the time fixed for the meeting, and if no quorum be then present, he shall declare the meeting dissolved. Every such dissolution shall be recorded by the Registrar, and the record shall be signed by the Chairman. If neither the Vice-Chancellor nor the Pro-Vice-Chancellor is able to attend, the members present, in the event of there being a quorum, shall elect one of themselves as Chairman for the meeting and shall proceed with the business.

12. All questions considered at meetings of the Senate shall be decided by a majority of the votes of the members present. If the votes be equally divided, the Chairman shall have a second or casting vote.

13. Every motion shall be affirmative in form, and shall begin with the word 'that.' It shall be open to discussion on being moved and seconded.

14. Not more than one motion and one amendment thereto shall be placed before a meeting at the same time.

## 15. A motion—

- (a) for change in the order of business as stated in the agenda paper,
- (b) for the adjournment of the meeting or discussion,
- (c) that the meeting pass to the next business on the agenda paper,
- (d) for dissolution of the meeting,
- (e) for directing the Syndicate, a Faculty, or any Committee to report at a subsequent meeting of the Senate,
- (f) for appointment of a Committee to inquire into and report on any matter before the Senate,

may be made at any time, as a distinct question, but not as an amendment, nor whilst a member is speaking, and no previous notice shall be necessary.

16. Any motion made under Regulation 15 shall take precedence of any question that may be before the meeting, and, if not withdrawn, must be disposed of before such question.

17. A motion for the adjournment of a meeting or of a debate on any particular question may be made at any time, but shall not be made so as to interrupt a speech. If a motion for the adjournment of the meeting be carried, the meeting shall thereupon adjourn to the time specified in the motion. If a motion for the adjournment of the debate be carried, the debate shall thereupon be adjourned to the time specified in the motion. The meeting shall thereupon pass to the next business, if any, on the agenda paper. If either of such motions be negatived, the business of the meeting or the debate, as the case may be shall be resumed.

18. A motion for the adjournment of a meeting shall be in the form, 'that this meeting do now adjourn to,' followed by words indicating the day and hour proposed for the adjourned meeting. A motion for the adjournment of a debate shall be in the form, 'that the debate on this question be now adjourned to,' followed by words indicating the day and hour. Ordinarily, a meeting or debate shall only be adjourned to the day following the meeting.

19. No amendment shall be proposed to a motion for adjournment of the meeting or of the discussion, except one substituting a time other than that proposed for such adjournment. A meeting or discussion continued on adjournment shall be deemed one with that preceding the adjournment.

20. A motion to pass to the next business shall be in the form, 'that this meeting do now pass to the next business on the agenda paper,' and may be moved at any time, but not so as to interrupt a speech. If the motion be carried, the motion under discussion, together with any amendments to it, shall drop.

21. A motion for the dissolution of the meeting shall be in the form, 'that this meeting do now dissolve,' and may be made at any time, but not so as to interrupt a speech. If such a motion be carried, the business still before the meeting shall drop, and the Chairman shall declare the meeting dissolved.

22. A motion directing the Syndicate, a Faculty or any Committee to review or to consider its decision or recommendation, may be made at any time during the discussion on any such decision or recommendation, but shall not be made so as to interrupt a speech. The motion shall clearly specify the matter thus referred back to the Syndicate or the Faculty for review or reconsideration, and may also

indicate generally the sense or direction in which the mover desires alteration in such decision or recommendation. The motion may also include an instruction that the Syndicate or the Faculty shall report at the next or at some other meeting of the Senate.

23. A motion for the appointment of a Committee to consider any question before the Senate at the time, shall state the purpose for which the Committee is to be constituted and the names of its members.

### **Amendments.**

24. Save as provided in Regulation 10 of this Chapter, notice of every amendment to be brought forward for the consideration of the Senate, shall be given by the proposer not less than three clear days before the date fixed for the meeting. Such notice shall state the precise terms of the amendment intended to be proposed. The Registrar shall circulate the notice to the members and, except with the special permission of the Vice-Chancellor or the Chairman of the meeting, no amendment, of which such notice has not been given, shall be considered by the meeting.

25. No amendment shall be proposed which would reduce a motion to its negative or opposite form.

26. No amendment shall be proposed which substantially raises a question already disposed of by the meeting, or is inconsistent with or adverse to any resolution already passed by the meeting.

27. The order in which amendments to a motion are to be brought forward shall be determined by the Chairman, and only one amendment shall be proposed at one time.

28. An amendment must be seconded in the same way as a motion; otherwise it shall drop.

29. When an amendment has been moved and seconded, it shall, unless ruled out of order, be stated from the Chair, and the debate may then proceed on the motion and the amendment together.

30. No motion or amendment shall be withdrawn from the decision of the meeting, without its unanimous consent; but this consent shall be presumed if the mover state his wish to withdraw the motion or amendment, and the Chairman, after an interval during which no dissent is expressed, announce that it is withdrawn.

31. Any motion or amendment standing in the name of a member, who is absent from the meeting, or who declines to move it, may be moved by any other member. If no member comes forward to move it, the motion or amendment shall drop.

32. The member who first rises to speak at the conclusion of a speech has the right to be heard. In cases of doubt, the Chairman shall decide who is in possession of the meeting.

33. A member having spoken to a motion or amendment, is not at liberty to speak again to such motion or amendment.

34. In so far as the question raised by an amendment is one to which he has not previously spoken, any member may speak to that question, though he has spoken to the original question or to a previous amendment.

35. The Chairman has the same right of moving or seconding or speaking to a motion or amendment as any other member, but he shall, save as provided under Regulation 39, vacate the Chair while so engaged, and the Chair shall during such time be taken by a

member nominated by the Chairman. Without leaving the Chair, the Chairman may, however, at his discretion or at the request of any member, explain to the meeting the scope of any motion or amendment.

36. Any member may, with the permission of the Chairman, even whilst another is speaking, rise to explain any misconception of expressions used by him, but he shall confine himself strictly to such explanation.

37. Any member may call the Chairman's attention to a point of order even whilst another is speaking, but no speech shall be made on such point of order.

38. The Chairman shall be the sole judge of any point of order, and may call any member to order, and shall have power to take such action as may be necessary to enforce his decision.

39. Proposals relating to the conferring of Honorary Degrees, votes of thanks, messages of congratulation or condolence, addresses, and other matters of like nature, may be moved from the Chair.

40. The meeting of the Senate held in October shall be deemed the Annual Meeting of the Senate.

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## CHAPTER II.

### **The Syndicate.**

1. Of the fifteen elected members of the Syndicate not less than ten shall be University Professors or Principals or Professors of constituent Colleges. The Senate shall at its first meeting proceed first to elect ten such members and then proceed to elect to the remaining vacancies. At each subsequent elec-



tion, similar procedure shall be followed *mutatis mutandis*.

2. Any elected member, who has been absent for a period exceeding three months, may be declared by the Vice-Chancellor to have vacated his seat.

3. In the event of a casual vacancy owing to death, resignation or otherwise, the members of the Syndicate shall, subject to the provisions of Section 12 of the Act as to the proportion of the members who must be University Professors or Principals and Professors of constituent Colleges, appoint a member of the Senate to the vacant membership, to act as a member of the Syndicate, until the next ensuing meeting of the Senate at which such vacancy can be filled up.

4. Any Faculty or member of the Senate shall be at liberty to submit any question to the Syndicate for its consideration and subsequently to bring before the Senate the decision of the Syndicate thereon, with a view to its modification or annulment.

5. The Syndicate shall meet, ordinarily, once a month, except during the vacation, and at other times when convened by the Vice-Chancellor, or, in his absence, by the Pro-Vice-Chancellor.

6. At all meetings of the Syndicate the Chairman shall have a vote, and, in case of an equality of votes, a second or casting vote.

7. Not less than seven days' notice of a meeting of the Syndicate shall be given by the Registrar, who shall, along with such notice, forward to each member the agenda of the business proposed to be brought forward.

8. In emergent cases, the Vice-Chancellor may dispense with the condition laid down in Regulation 7.

9. Save when otherwise provided for by these Regulations, any one or more of the powers conferred and duties imposed on the Syndicate may, subject to its supervision, control and approval, be exercised and performed by a Sub-Committee appointed by the Syndicate for the purpose.

10. In the absence of the Vice-Chancellor and the Pro-Vice-Chancellor, the members present shall elect one of themselves as Chairman for the meeting.

11. The Chairman may at any time apply the rules for the discussion of questions in the Senate to the discussion of any particular question before the Syndicate.

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### CHAPTER III.

#### **The Faculties.**

1. Each Faculty shall, at its first meeting, elect one of its members as the Dean of the Faculty who shall hold office, until the appointment of a Dean for the next year at the Annual Meeting of the Faculty.

2. In the event of the office of Dean being vacated in the course of the year, the Faculty shall proceed to elect a new Dean within one month of the occurrence of the vacancy, or, as soon thereafter as practicable.

3. Every meeting of a Faculty shall be convened by the Registrar, under the orders of the Vice-Chancellor or the Syndicate or the Dean of the Faculty.

4. Each Faculty shall, on a date in October to be fixed by the Vice-Chancellor or the Dean, hold a meeting to be called the Annual Meeting of the Faculty.

5. Not less than 14 days notice shall be given by the Registrar of every meeting of a Faculty.

6. The Dean shall preside at all meetings of the Faculty, but in his absence the members present shall elect one of their number as Chairman of the meeting.

7. The Regulations relating to notice of business contained in Chapter I, shall, so far as may be, apply to all business proposed at a meeting of a Faculty; provided that the Chairman may, for reasons of urgency, bring any matter before any meeting without notice being given in the agenda paper, and provided that any member may, with the permission of a majority of the members present at a meeting, bring forward any matter in that meeting, without notice.

8. The Chairman at a meeting of a Faculty may at his discretion apply the Regulations prescribed for discussion of matters at the Senate.

9. It shall be within the power of the Faculty (1) to appoint a Committee of the Faculty for any purpose within the cognizance or powers of the Faculty, (2) to hold meetings of the Faculty along with any other Faculty or a Committee thereof, for the discussion of any matter of common interest.

10. Copies of the proceedings of all meetings of the Faculty shall be sent to all the members of the Senate.

11. Two or more Faculties may be called upon by the Senate or the Syndicate to meet together for the disposal of any questions affecting more than one Faculty. In such cases, the joint meeting shall elect its own Chairman.

12. Each Faculty may at its Annual Meeting co-opt as many members, not exceeding the number of members assigned to it by the Senate, as it may deem necessary. The members so co-opted shall hold office

till the conclusion of the next Annual Meeting of the Faculty.

13. The members so co-opted shall be entitled to vote at all meetings of the Faculty, and be eligible for appointment to the Boards of Studies, and other Boards or Committees of the Faculty.

14. All questions pertaining to the work of a Faculty shall ordinarily be submitted to the Faculty concerned in the first instance.

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## CHAPTER IV.

### **The Boards of Studies.**

1. The Senate shall, from time to time, determine the subjects for which Boards of Studies shall be constituted in each Faculty and the number of members constituting each Board. The Faculties shall thereupon proceed to appoint such Board or Boards, and appoint a Convener for each Board.

2. The members of the several Boards shall hold office for the term of one year. Vacancies in the course of the year shall be filled by the Faculty concerned.

3. Each Board shall dispose of its business by meetings or correspondence, or by both, as may be convenient.

4. Two or more Boards may be called upon by a Faculty, the Syndicate or the Senate to meet together for the disposal of any question affecting more than one Board. In such cases, the joint meeting shall elect its own Chairman.

5. Meetings of Boards shall be presided over by the Convener of the Board ; in the absence of the Convener, the members present shall elect a Chairman.

## CHAPTER V

**The Boards of Examiners.**

1. The Syndicate shall, from time to time, appoint such and so many Boards of Examiners as may be necessary, and prescribe their respective constitution, powers and duties ; provided that, for each subject or group of subjects forming part of the course of studies for any examination, at least one external and independent Examiner shall be appointed by the Syndicate.

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## CHAPTER VI.

**The Registrar and the Assistant Registrar.**

1. The Registrar shall be appointed for a term of five years, but, on the expiration of his term, shall be eligible for re-appointment.

2. It shall be the duty of the Registrar—

- (a) to be the custodian of the records, Common Seal, and such other property of the University as the Syndicate shall commit to his charge ;
- (b) to act as Secretary to the Syndicate and to attend, as far as possible, all meetings of the Senate, Faculties, Syndicate and any Committees appointed by the Senate, the Faculties, or the Syndicate, and to keep minutes thereof ;
- (c) to conduct the official correspondence of the Senate and the Syndicate ;
- (d) to issue all notices convening meetings of the Senate, Faculties, Syndicate, Boards of Studies, Boards of Examiners, and of any

- Committees appointed by the Senate, the Syndicate, the Faculties or any of the Boards;
- (e) to arrange for and superintend the examinations of the University at Bedares; and
- (f) to perform such other work as may, from time to time, be prescribed by the Syndicate.

3. The Syndicate shall make arrangements for the discharge of the duties of the Registrar during his absence.

4. The duties of the Assistant Registrar shall, from time to time, be defined by the Syndicate.

5. There shall also be such permanent staff of subordinate assistants and servants as may, from time to time, be sanctioned by the Council. Appointments to such staff shall be made by the Syndicate.

6. The Registrar shall, on application previously made for the purpose of fixing a convenient hour, arrange that any member of the Court or the Senate or of a Faculty, shall have access to the proceedings of the Senate, the Syndicate, or the Faculty, respectively.

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## CHAPTER VII.

### **The Librarian.**

1. The Librarian shall be a whole-time officer and shall be appointed by the Council on the recommendation of the Syndicate with such duties, at such remuneration, and upon such terms and conditions as it shall deem fit.

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## CHAPTER VIII.

### **The University Library.**

1. The management of the University Library shall be vested in a Library Committee, consisting of

(a) the Vice-Chancellor, the Pro-Vice-Chancellor, the Registrar and the Librarian as *ex-officio* members ;  
(b) sixteen other members appointed by the Senate (of whom not less than ten shall be Professors or other members of the teaching staff of the University or Principals or Professors of constituent Colleges) as ordinary members.

2. The Senate shall appoint the members of the Committee in such a way as to secure, as far as possible, the representation of all the Faculties.

3. The appointed members shall hold office for two years.

4. The Librarian shall be the Secretary of the Committee.

5. Five members shall form a *quorum* for a meeting of the Committee.

6. The Committee shall report to the Syndicate the amount of money required in each year for the purchase of new books and periodicals, and for the maintenance of the Library.

7. Library assistants and servants shall be appointed by the Library Committee, subject to the general control of the Syndicate.

8. The duties of the Library Committee shall be—

I to recommend to the Syndicate rules regulating—

- (a) the use of the Library by members of the University and by other persons ;
- (b) the deposit of caution-money for the use of books ;
- (c) the conditions of borrowing and returning books ;
- (d) the imposition of fines or the suspension of privileges for the loss, mutilation or dis-

figurement of books; or for any breach of the Library rules;

- (e) the annual inspection of the Library ;
- (f) the payment of fees for the use of the Library by persons other than the members of the University ; and
- (g) all other matters relating to the management of the Library ;

II to purchase or acquire books, manuscripts, literary and scientific periodicals, or other publications ;

III to provide such furniture and equipment as may be necessary.

9. The manuscripts shall always be kept under lock and key, and shall not be removed without the special permission of the Syndicate, on the recommendation of the Library Committee.

## CHAPTER IX.

### **Register of University Students.**

1. The Registrar shall maintain, in such form as the Syndicate may from time to time prescribe, a register of all under-graduates and graduates reading for a higher examination or carrying on research under a Professor, and of all such persons as are allowed by special grace of the Senate to attend lectures or carry on research in the University.

2. All persons registered under the preceding Clause shall be called "Students of the University."

3. The Syndicate shall prescribe the form of the register mentioned in Regulation 1.

4. No person shall be deemed a "University Student," unless and until his name has been duly



entered in the register, and none but a "University Student" shall be eligible for admission to any University examination other than the examination for admission to the University.

5. Every student on registration shall be informed, through the Principal of his College, of the registered number under which his name has been entered in the register, and that number shall be quoted in all subsequent reports concerning that student and in all applications by that student to any University officer.

6. Every student shall be required to pay the University a fee of Rs. 2, when his name is sent in for registration.

No further fee for registration shall be charged, unless a student's name is, on non-payment of fees, absence without notice, or expulsion, struck off the register, in which case he shall pay Re. 1 to have his name re-entered in the University register.

7. Any registered student may at any time receive a certified copy of all entries under his name on payment of Re. 1.

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## CHAPTER X.

### **Registration of Graduates.**

1. All graduates of the University shall, on payment of a registration fee of Rs. 5, be entitled to have their names entered in the register of University graduates.

2. Subject to the provision of Statute (20) (2) (vii), the register shall be kept in such form as the Syndicate shall prescribe.

3 Application for entry of name on the register of University graduates shall be ordinarily made

within six months of the date on which the degree was conferred on the applicant at the Convocation. After the said period, applicants shall be required to pay a fee of Rs. 10.

4. Each registered graduate shall be required to pay an annual fee of Rs. 2, on or before the 31st January of each year. In case of non-payment before such date, his name shall be removed from such register, but he shall be eligible for re-entry on payment of the fee in arrears.

5. The fees payable for admission and the annual fee payable may be compounded on payment of Rs. 20 at any time.

6. Registered graduates shall be entitled to take part in the Convocations, and shall be entitled to such other privileges and rights as may, from time to time, be conferred in conformity with the Regulations.

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## CHAPTER XI.

### Residence of Students.

1. (a) Every student shall reside in a University hostel, or, if he is a student of a constituent College, in a College hostel, unless allowed by the Pro-Vice-Chancellor to reside with his parents or guardians, under such conditions as the Pro-Vice-Chancellor may, from time to time, prescribe.

(b) A student of a constituent College, which has been admitted to privileges of the University, shall not be permitted by the Pro-Vice-Chancellor to reside elsewhere than in a hostel, save on the recommendation of the Principal of the College concerned.

2. Students in the Faculties of Theology and Oriental Learning shall reside either in the manner prescribed in Regulation 1 of this Chapter, or in *chhattras* or *ashrams* which are approved by the Pro-Vice-Chancellor.

Every *chhattra* or *ashram*, approved by the Pro-Vice-Chancellor, shall be placed under the complete control of the University, and shall provide adequate supervision or shall permit the provision by the University of such supervision, and shall submit to inspection by the Pro-Vice-Chancellor, and, further, shall comply with the following conditions:--

(i) that the *chhattra* or *ashram* will not permit the residence within it of inmates of an age less than that prescribed in these Regulations for the admission of students to these two Faculties;

(ii) that the *chhattra* or *ashram* will not permit the residence within it of any inmate who is not a student of the University in one or other of these Faculties.

Should a *chhattra* or an *ashram* fail to comply with one or other of these conditions, the Pro-Vice-Chancellor, after consulting the Syndicate, shall withdraw from that *chhattra* or *ashram* the privilege of receiving students of the University, and the students of the University who are residing in it shall forthwith leave it.

3. No student shall be admitted to the University or to any constituent College until the question of his residence has been settled.

4. For the purpose of these Regulations, the term "guardian" shall mean:--

(i) the legal guardian of the student if one has

been appointed, or, in his absence, or if the student has no parent living, a near relative of responsible age ;

(ii) a person declared in writing by the student's parent, or, if he has no parent living, by one of the persons described in (i) above, to be his guardian ;

(iii) if the student has no parent, near relative or legal guardian, a person approved by the Pro-Vice-Chancellor.

In all cases, the person declared to be the student's guardian must be approved by the Pro-Vice-Chancellor as a suitable person in age and position to act as guardian.

*(a) University Hostels.*

5. The University shall provide such and so many hostels for the residence of students as may, from time to time, be required.

6. Such hostels shall be constructed on a plan approved by the Syndicate.

7. Such hostels shall be under the supervision of a Warden, appointed in accordance with rules which the Syndicate may, from time to time, prescribe.

8. Each hostel shall have its recreation grounds, and shall manage its own games, either by itself or in conjunction with other hostels.

9. The internal management of each hostel shall be carried on in accordance with rules which the Syndicate may, in consultation with the Council, from time to time, prescribe.

10. Students residing in the hostels shall be members of the University institutes or societies for the promotion of social intercourse, for creating literary and scientific tastes and for promotion of physical culture and organized games. Such institutes and societies shall be under such supervision as the Syndicate may approve.

11. The Syndicate shall exercise supervision over the hostels through the Students' Residence Committee as constituted in Chapter XII.

12. In matters appertaining to religious instruction and observances, the Council shall exercise supervision over the hostels, in consultation with the Faculty of Theology and through the Students' Residence Committee.

(b) *College Hostels.*

13. The administration of hostels attached to any constituent College admitted to privileges of the University, shall be in the hands of the Principal of that College.

## CHAPTER XII.

### Students' Residence Committee.

1. At the annual meeting of the Syndicate, a Committee shall be appointed which shall be called the "Students' Residence Committee." It shall consist of—

- (a) the Pro-Vice-Chancellor,
- (b) two members to be nominated by the Faculty of Theology,
- (c) two members of the teaching staff to be appointed by the Syndicate,
- (d) two members to be nominated by the Council,
- (e) two representatives, who shall be graduates of any Faculty, elected by the students in such manner as the Syndicate may, from time to time, prescribe,
- (f) the Chief Medical Officer in charge of the Hostels and,
- (g) the Wardens of the Hostels.

The members appointed, nominated or elected, shall hold office for the term of one year, and shall be eligible for re-election.

The Committee shall deal, subject to the Regulations (especially Regulations 1 and 2 of Chapter XI) and to the general control of the Syndicate, with all questions relating to the admission, residence and social life of the students in University hostels. The Pro-Vice-Chancellor shall be *ex-officio* Chairman of the Committee. Casual vacancies during the year shall be filled up by the Syndicate, on the recommendation of the body entitled to nominate for the vacancy.

2. Nothing in these Regulations shall be taken to authorise the Students' Residence Committee or any member thereof to interfere with the control of a Principal over his students.

## CHAPTER XIII.

### Discipline.

1. The rules of discipline touching students of the University shall be framed by the Senate.

(a) *Discipline among students other than those of constituent Colleges admitted to privileges.*

2. It shall be the duty of the Pro-Vice-Chancellor to see that these rules are carried out, and also to maintain discipline among the students in matters not specifically provided by rule.

3. The Pro-Vice-Chancellor shall control the discipline of students while they are in lecture-rooms or laboratories, through the Professor in charge, and while they are in hostels, through the Wardens of the hostels.

*(b) Discipline among students of constituent Colleges admitted to privileges.*

4. It shall be the duty of the Principal of a constituent College, admitted to privileges, to see that the rules of the Senate are carried out, and also to maintain discipline among his students in matters not specifically provided by rule.

5. If the Pro-Vice-Chancellor observes that discipline is relaxed in any College, he shall bring the matter in the first instance to the notice of the Principal, and, if necessary, to the notice of the Vice-Chancellor and the Syndicate.

6. The Pro-Vice-Chancellor shall, with the co-operation of the Principal of the College and subject to the provisions of Regulation 3, maintain discipline among the students of constituent Colleges, admitted to privileges, while they are outside the College or the College hostels to which they belong.

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## CHAPTER XIV.

### **Admission of Students.**

1. Every candidate for any degree or diploma granted by the University shall, except when exempted under any of these Regulations, be required to pass the examination prescribed by these Regulations for admission to the University for the Faculty concerned, before entering upon the course prescribed for such degree or diploma.

2. Every male candidate for any degree or diploma granted by the University shall have completed sixteen years of age within 30 days of his entering upon the course prescribed for such degree or diploma : provided that, in the case of candidates for the courses in the Faculties of Theology and Oriental Learning, the age fifteen may be substituted for sixteen.

3. The examinations for admission shall be those prescribed in Chapters XXVII, XXXVIII, and XXXIX.

The conditions to be fulfilled by schools, recognised for the purpose of sending up candidates to the examinations for admission, shall be those prescribed in Chapter XVII. The Regulations governing admission are collected together in Chapter XL.

*A.—Admission to the University courses in Faculties other than Theology and Oriental Studies.*

4. A candidate may gain admission to the University courses in Faculties other than those of Theology and Oriental Learning, either (i) by passing the Admission Examinations in Arts and Science prescribed in Chapter XXVII of these Regulations, or (ii) by passing any one of the other examinations as specified below and fulfilling such other conditions as the Syndicate may impose.

*(i) Conditions to be fulfilled by candidates for the Admission Examinations in Arts and Science.*

5. A candidate for the Admission Examinations in Arts and Science shall be either a pupil of a school maintained or recognised by the University, or a private candidate.

6. A candidate shall be deemed to be a pupil of a recognised school when he has studied in it or in more than one recognised school, for at least two years immediately previous to his admission to the University, or, if local rules regarding study, examination, etc., demand, for a longer period. Such a candidate shall apply, through the Headmaster of the school where he is studying, to the Registrar, in such form as the Syndicate may prescribe. His application and fee shall be despatched so as to reach the Registrar at least six weeks before the date of the commencement of the Admission Examination. The fee shall be Rs. 10.



7. A private candidate is one who has not studied in any school or other educational institution for one year immediately previous to his admission to a University examination.

8. When a private candidate is a resident of British India, he shall be certified by an Inspector of Schools appointed by the Local Government of the Province or place where he resides, or by some other officer empowered by the Local Government for this purpose to be a fit person to appear at the Admission Examination. The Syndicate shall ordinarily require that, in cases where a candidate has at any time previously studied in a school or an institution, a satisfactory certificate from the head of that school or institution shall be forwarded by the certifying officer.

9. When a private candidate is a resident of the territory of an Indian Prince or Chief, he must, (a) if the Government of India have made the direction specified in Regulation 6 (a) of Chapter XL (Regulation 2 (a) of Chapter XVII) regarding that State, be certified by the educational authority of that State to be a fit person to appear at the Admission Examinations; or, (b) if no such direction has been made regarding that State, be similarly certified by an officer empowered by the Government of India to be so qualified. In either case, if the candidate has at any time previously studied in a school or an institution, the certificate prescribed under the last sentence of Regulation 10 of Chapter XL (Regulation 8 of the present Chapter) shall ordinarily be required.

10. A private candidate shall apply to the Registrar in such form as the Syndicate may prescribe. His application and fee shall be despatched through the prescribed channel, so as to reach the Registrar at least six months before the commencement of the Admission Examinations; provided that, for the examina-

tion of 1919, the period for sending applications to appear as private candidates shall be three months before the commencement of the examination. The fee shall be Rs. 10.

11. Whether a candidate is a pupil of a recognised school or a private candidate, he shall satisfy the Syndicate as to his fitness for admission to the courses of the University by passing the Admission Examinations, which shall be held at Benares, at times prescribed from time to time by the Syndicate.

*(ii) The conditions to be fulfilled by candidates who pass some other examination.*

12. The Syndicate may admit to the University courses a candidate who has passed the Matriculation Examination of any Indian University established by Act of the Legislature or any School-Leaving Certificate Examination held in a British Province or in a State, which, on the advice of the Syndicate, shall at any time be recognised by the Government of India as qualifying for admission, or any one of the following examinations :—

the Senior Oxford Local Examination ;

the Senior Cambridge Local Examination ;

the Final Examination prescribed for European Schools ;

the Diploma Examination of a Chiefs' College.

The Syndicate may also so admit candidates coming from outside India who produce certificates of having passed an examination which, in the opinion of the Syndicate, is equivalent to the above-mentioned examinations, or who have, in the opinion of the Syndicate, if necessary after examination, attained a degree of knowledge equivalent to that expected at the Admission Examinations.

13. The Syndicate shall have power, from time to time, to prescribe further conditions to be complied

with by candidates, and, in especial, to prescribe further tests for candidates who have passed these examinations; provided that, if any such further test is held at a centre other than Benares, the arrangements (especially those regarding the supervision of the examination) shall be made in conjunction with the Local Government or the Government of the State concerned.

14. In special cases, by permission of the Syndicate, a candidate may be admitted to the B.A. and B.Sc. courses of the University, if he has passed the Intermediate Examination of some other Indian University established by Act of the Legislature.

*B.—Admission to University courses in the Faculties of Theology and Oriental Learning.*

15. A candidate may gain admission to the University courses in the Faculty of Oriental Learning, either (i) by fulfilling the conditions prescribed in Regulations 4 to 8 of Chapter XL (Regulations 5 and 6 of the present Chapter, read with the Regulations of Chapter XVII), save as regards the payment of a fee, and by passing the Admission Examinations in Arts and Science with Samskrit as one of the subjects, or (ii) by fulfilling the conditions prescribed in Regulations 14 and 15 of Chapter XL (Regulations 12 and 13 of the present Chapter) and passing any of the examinations mentioned in Regulation 12 (Regulation 14 of Chapter XL) with Samskrit as one of the subjects, or (iii) by passing the *Praveshika Pariksha*, or (iv) by passing—

the *Prathama* Examination of the Samskrit College, Benares;

the *Prajna* Examination of the Punjab University : provided that candidates under (i) and (ii) of this Regulation who have not taken Samskrit as one of the

subjects of their examination, may be admitted on satisfying the Syndicate, as the result of an examination, that they possess a sufficient knowledge of Samskrit.

16. In case (iii), a candidate either shall be a pupil of a school maintained by the University or a recognised school which, under the provision to Regulation 5 (c) of Chapter XL (Regulation 1 (c) of Chapter XVII) is permitted to prepare and send up candidates for the *Praveshika Pariksha*, or, if he is not a pupil of such a recognised school, shall produce a certificate, as provided for under Regulations 19 and 20 of Chapter XL (Regulations 17 and 18 of the present Chapter), that he is a fit person to be sent up for the *Praveshika Pariksha*.

17. When the candidate is a resident of British India, the certificate specified in Regulation 18 of Chapter XL (Regulation 16 of the present Chapter) shall be signed by an officer empowered for this purpose by the Local Government of the Province or place where the candidate resides or studies.

18. When the candidate is a resident of the territory of an Indian Prince or Chief, the certificate specified in Regulation 18 of Chapter XL (Regulation 16 of the present Chapter) shall be signed by the educational authority of that State, if the direction provided for in Regulation 6 (a) of Chapter XL (Regulation 2 (a) of Chapter XVII) has been made in respect of that State ; otherwise, it shall be signed by an officer empowered for this purpose by the Government of India.

19. A candidate for the *Praveshika Pariksha* shall apply to the Registrar, in such form as the Syndicate may prescribe. His application shall be despatched through the prescribed channel, so as to reach the Registrar at least six weeks (and, in the

case of private candidates, six months) before the commencement of the examination; provided that for the examination of 1919, the period for sending applications to appear as private candidates shall be three months before the commencement of the examination.

20. The *Praveshika Pariksha* shall be held at times prescribed from time to time by the Syndicate, at Benares and at such other centres as the Syndicate may, from time to time, direct; provided that at centres other than Benares, the arrangements (especially those regarding the supervision of the examinations) shall be made in conjunction with the Local Government or the Government of the State concerned.

21. The Syndicate may admit to the *Shastri* course students who have passed the *Madhyama Examination* of the Benares Samskrit College. .

22. Candidates for admission to the courses of the Faculty of Theology (*Dharma*) must be Hindus and must have fulfilled the conditions prescribed in Regulation 17 (iii) or (iv) of Chapter XL (Regulation 15 (iii) or (iv) of the present Chapter), or in Regulation 23 of Chapter XL (Regulation 21 of the present Chapter.)

### *C. Inter-University Regulations.*

23. Notwithstanding anything contained in these Regulations, a student, who is qualified under the forgoing Regulations for admission to the University and who is a member of some other Indian University, shall not be admitted in to the University or any constituent College thereof, without the production of :---

(1) a leaving or transfer certificate signed by the Principal of his last College, and certifying to the

satisfactory conduct of the student and mentioning the highest examination he has passed, and

(2) a certified copy of all the entries against his name in the Enrolment Register of his University, if such a copy is obtainable.

24. A student of some other Indian University shall in any case be admitted only at the beginning of the particular course which he proposes to take in the University.

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## CHAPTER XV.

### **Admission of Women Students and special Regulations governing their residence, examination, etc.**

1. Women candidates shall be eligible for admission to the University and to its examinations, degrees and diplomas.

2. There shall be no age limit for the admission of women candidates.

3. With the permission of the Syndicate, women candidates shall be eligible to appear at all examinations of the University (whether for admission or for a degree or a diploma) as private candidates.

4. It shall be open to the Syndicate to make arrangements for the examination of women candidates in *pardah*.

5. Women candidates shall not be compelled to appear in person before the President of the Convocation for their diplomas.

6. The Syndicate shall, from time to time, make such arrangements for the residence of women students as may be necessary.

7. In other respects, the conditions governing women candidates and students shall be those prescribed in these Regulations for male candidates.

## CHAPTER XVI.

**Admission of Colleges to privileges  
of the University.**

1. Colleges in Benares may be admitted to privileges of one or more Faculties, and in such subject or subjects as the Senate may recommend.

2. All applications for admission to privileges must be addressed to the Syndicate, through the Registrar.

3. A College applying for such admission shall satisfy the Syndicate---

- (a) that the College is to be under the control of a regularly constituted governing body ;
- (b) that the qualifications of the teaching staff and the conditions governing their tenure of office are such as to make due provision for the courses of instruction to be undertaken by the College ;
- (c) that the buildings in which the College is to be located are suitable ;
- (d) that due provision has been or will be made for a Library ;
- (e) where admission to privileges is sought in any branch of experimental science, that arrangements have been or will be made for imparting instruction in that branch of science, in a properly equipped laboratory or museum ;
- (f) that the financial resources of the College are such as to make due provision for its continued maintenance ;
- (g) that the College is a residential College, and provision has been or will be made for the residence of the students, the Principal and

at least for such members of the teaching staff as are in charge of the students' hostels.

For the purpose of these Regulations, a residential College shall be defined as one in which all the students reside in hostels maintained or recognised by the College, unless specially allowed by the Principal to reside with their parents or guardians, who shall also undertake to fulfil the conditions laid down by the Syndicate.

The application shall further contain an assurance that, after the College is admitted to privileges, any transference of management and all changes in the teaching staff shall be forthwith reported to the Syndicate; that the College shall conform to and comply with all rules and conditions which the Syndicate may, from time to time, prescribe for the discipline, residence and conduct of the students; and that the College shall be subject to the general control of the University in the matter of imparting instruction to and teaching its students, and in respect of the participation of the College staff in the general work of the University.

4. On receipt of a letter of application under Subsection (1), the Syndicate shall—

- (a) direct a local enquiry to be made by a Commission of not less than three persons nominated by the Syndicate in this behalf, one of whom shall be a member of the Court;
- (b) make such further enquiry as may appear to them to be necessary; and,
- (c) report to the Senate on the question, whether the application should be granted or refused, either in whole or in part, embodying in such



report the results of any inquiry under Clauses (a) and (b); .

and the Senate shall, after such further inquiry, if any, as may appear to them to be necessary, record their opinion on the matter.

5. The Vice-Chancellor shall submit the application and all proceedings of the Syndicate and Senate relating thereto to the Visitor, who, after such further inquiry as may appear to him necessary, shall accord his permission to such admission to privileges, or pass such orders as he may deem fit and proper. The College shall, on such approval being accorded, be deemed to have been so admitted.

6. When a College desires to add to the courses of instruction, in respect of which it is so admitted, the procedure prescribed by Regulation 3 shall, so far as possible, be followed.

7. The Syndicate may call upon any College to take, within a specified period, such action as may appear to them to be necessary, in respect of any of the matters referred to in Regulation 3.

8. The Senate may, on the recommendation of the Syndicate and with the approval of the Visitor, withdraw, in whole or in part, the privileges so granted to any College. The procedure shall be as follows:

(a) A member of the Syndicate, who intends to move that the rights conferred on any College by such admission to privileges be withdrawn in whole or in part, shall give notice of the motion, and shall state in writing the grounds on which the motion is made;

(b) Before taking the said motion into consideration, the Syndicate shall send a copy of the notice and written statement mentioned in (a) to the President of the governing body concerned, together with an intimation that

any representation in writing, submitted within a period specified in such intimation on behalf of the College, will be considered by the Syndicate, provided that the period so specified may, if necessary, be extended from time to time by the Syndicate;

- (c) On receipt of the representation, or on expiration of the period referred to in (b), the Syndicate, after considering the notice of motion, statement and representation, and after such inspection by any competent person authorised by the Syndicate in this behalf, and such further inquiry as may appear to them to be necessary, shall make report to the Senate;
- (d) On receipt of the report under (c), the Senate shall, after such further inquiry, if any, as may appear to them to be necessary, record their opinion on the matter.
- (e) The Vice-Chancellor shall submit the motion and all proceedings of the Syndicate and the Senate relative thereto to the Visitor, who, after such further enquiry, as may appear to him necessary, shall pass such orders as he may deem fit and proper.

9. The Syndicate may, from time to time, require each constituent College, admitted to privileges, to furnish such returns, reports and other information as the Syndicate may require, to enable them to judge of the efficiency of the College.

## CHAPTER XVII.

### Recognition of Schools.

1. When a school is situated in British India, the conditions regarding its recognition for the purpose

of sending up candidates for the Admission Examinations of the University shall be as follows :—

- (a) The school shall apply to such officer and in such form and shall specify such particulars as shall be prescribed by the Local Government of the Province or place in which it is situated, and the Local Government, if it thinks fit, and after such inquiry as it may deem necessary, may recognise the school for the purpose of sending up candidates.
- (b) If the application is granted, the school shall be entered on the list of schools so recognised, and a copy of the entry shall be sent to the Registrar of the University.
- (c) No school so recognised shall, during the period that it remains so recognised, prepare or send up candidates for the Matriculation or Admission Examination of any other University; provided that, with the special consent of the Syndicate, it may prepare and send up candidates for the *Praveshika Pariksha*.
- (d) The Local Government may at any time remove any school from the list of recognised schools.
- (e) A copy of the order removing a school from the list of recognised schools shall forthwith be sent to the Registrar of the University.

2. When a school is situated in the territory of an Indian Prince or Chief, the procedure governing its recognition for the purpose of sending up candidates for the Admission Examination of the University shall be as follows :—

- (a) The Government of India may direct in respect of any State that recognition of a school by the Government of that State shall (subject in any case to revision by the Government of India) be recognition for the purpose of sending up candidates.

- (b) If a school situated in a State, regarding which the Government of India have made no such direction, desires recognition, the Government of India may, if they think fit, and after such enquiry as they may deem necessary, empower the Government of that State to recognise that school for the purpose of sending up candidates.
- (c) In either case, the conditions (a), (b), (c), (d) and (e) of Regulation 5 of Chapter XL (Regulation 1 of the present Chapter) shall be fulfilled, save that (subject to revision by the Government of India of the granting and retention of recognition) the Government of the State concerned shall be substituted for the Local Government.

3. The Syndicate shall have power, from time to time, to prescribe further conditions for recognition to be complied with by schools which fulfil the conditions required under the two preceding Regulations.

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## CHAPTER XVIII.

### **Honorary Degrees.**

1. When the Vice-Chancellor, and not less than two-thirds of the other members of the Syndicate, recommend that an Honorary Degree be conferred on any person, on the ground that he is, in their opinion, by reason of eminent position and attainments, a fit and proper person to receive such a degree, and when their recommendation is supported by not less than two-thirds of the members present at a meeting of the Senate and is confirmed by the Chancellor, the Senate may confer on such person the Honorary Degree so recommended, without requiring him to undergo any examination.

## CHAPTER XIX.

**Convocation.**

1. A Convocation for the purpose of conferring degrees shall be held annually in the month of October or November, or at such other time as the Chancellor shall direct.

2. Unless specially exempted, every candidate for a degree, other than a woman candidate, must appear in person at the Convocation to receive the same. A candidate so exempted shall not receive his diploma, except on payment of a fee of Rs. 10.

3. The diplomas of degrees shall bear the signature of the Vice-Chancellor.

4. The Syndicate shall, from time to time, lay down the procedure to be followed at the Convocation.

5. Special Convocations for conferring degrees, or for other purposes, may be held at such other date and time as the Syndicate may determine.

## CHAPTER XX.

**Fellowships, Studentships, Scholarships,  
Medals and Prizes.**

1. The Council may, from time to time, establish such fellowships, studentships and scholarships, and award such medals and prizes as it may think fit, and shall, from time to time, lay down the terms and conditions under which they are to be awarded and held; provided that expenditure on such fellowships, etc., shall not be regarded as a recurring charge of the University, for the purpose of Section 14 of the Act.

## CHAPTER XXI.

**Endowments.**

1. Benefactors, desiring to endow professorships, lecturerships, fellowships, studentships, scholarships,

medals and prizes, shall communicate to the Vice-Chancellor the conditions, if any, they wish to impose.

2. The Council, on receiving the report of the Syndicate, shall consider whether it will be within the objects of the University and consonant with the Act, the Statutes and the Regulations to accept the conditions of the endowment, and accept the offer or not.

3. An account of all the endowments, with the conditions of their award and the names of the benefactors, shall be printed in the University Calendar.

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## CHAPTER XXII.

### **Academic Costumes.**

1. The Senate shall, in consultation with the Council, from time to time, prescribe the academic costume to be worn by the members of the University.

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## CHAPTER XXIII.

### **Fees.**

1. The Council shall, on the recommendation of the Syndicate, from time to time, prescribe the fees payable by students—

(a) for admission to the various examinations held by the University, provided that, save in the case of private candidates for the Admission Examination and of all examinations for admission, degrees or diplomas held under the Faculties of Theology and Oriental Learning, the fee charged shall not be less than that charged for corresponding examinations by the University of Allahabad.

(b) for attendance at University and College lectures ;

- (c) for admission to and residence in hostels; and
- (d) such other fees as it may, from time to time, deem fit to charge.

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#### CHAPTER XXIV.

##### **Remuneration to Examiners.**

1. The fee for setting and moderating question papers and for examining answer-books and dissertations and for practical and *vivâ voce* examinations, shall be fixed, from time to time, by the Council, on the recommendation of the Syndicate, which shall also fix the travelling allowance, if any, to be paid to examiners.

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#### CHAPTER XXV.

##### **Laboratories, Museums and Botanical Gardens.**

1. The Council shall, from time to time, provide for the establishment and maintenance of such laboratories, workshops, museums and gardens or farms as may be necessary for practical instruction in science and for the purposes of research. The Syndicate shall, from time to time, make rules for their management and use.

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#### CHAPTER XXVI.

##### **Examinations.**

###### *General Rules.*

1. Every candidate for any degree granted by the University, shall be required to pass an examination for admission to the University, as prescribed in Chapter XIV, the Intermediate Examination, and the examination or examinations for the degrees prescribed by these Regulations.

2. All applications to appear in an examination shall be addressed to the Registrar, and shall be

presented within such time and in such manner as may be prescribed by the Syndicate.

3. A candidate who fails to pass or who, from sickness or other cause, is unable to present himself for any examination, shall not receive a refund of his fee ; but the Syndicate may, for sufficient cause, permit the candidate to present himself for the next ensuing examination, without payment of a further fee.

4. Except as provided in Regulation 3, a candidate, when admitted to one or more subsequent examinations or any part thereof, shall, before admission, pay the prescribed fee for such examination, on each occasion when he is so admitted.

5. On receipt of the fee prescribed for the examination, the Registrar shall examine the application, which, if found to be in due form and in order, shall be registered in the register of candidates for such examination. The Registrar shall thereupon issue an admission card to the candidate, entitling him to sit for the said examination.

6. A candidate may not be admitted into the examination room, unless he produces to the officer conducting the examination, his admission card, or satisfies such officer that it will be subsequently produced.

7. A student shall be deemed to have diligently pursued a regular course of study during a year or years, if he has attended at least seventy-five per cent. of the course of lectures delivered in that subject during the year or years, and has produced a satisfactory character certificate from the Head of his College or School.

8. The Syndicate shall have power to condone any deficiency of attendance, but only for cogent reasons.



9. Except when otherwise directed by the Regulations or by the examiner in the examination paper, every candidate shall answer his questions in the English language, in the examinations in Arts, Science and Law, and, in the examinations held in the Faculties of Theology and Oriental Learning, in such language as may be required in the question paper.

10. Candidates passing any University examinations will be placed in three Classes, namely, the First, Second and Third. The Syndicate shall, from time to time, prescribe conditions under which candidates will be placed in each of these Classes.

11. The term "year" in these Regulations means the term or terms of study or periods of study in the University, or in one of its constituent Colleges, prescribed by the University, during a year of the Gregorian Calendar.

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## CHAPTER XXVII.

### **Admission Examinations in Arts and Science.**

1. There shall be an Admission Examination held every year at Benares, at such times and on such dates as the Syndicate may prescribe, for admission to the studies of the Faculties of Arts and Science.

2. The candidates admitted to this examination shall fulfil the conditions prescribed in Regulations 4 to 13 of Chapter XL (Regulations 5 to 11 of Chapter XIV, read with the Regulations of Chapter XVII).

3. The Registrar shall take the orders of the Syndicate on each application for admission to this examination.

4. The Admission Examination shall be conducted by means of papers. There shall also be a practical examination in science subjects.

5. Candidates for the Admission Examination in Arts and Science shall be examined in the following subjects :—

- A. (1) English,  
(2) Mathematics,  
(3) History and Geography,  
(4) Samskrit, and  
(5) any *one* or, *two* of the following subjects:—  
(a) A Modern Indian Language.  
(b) Any other Classical Language.  
(c) A Modern European Language.  
(d) Elementary Physics and Chemistry.  
(e) Botany.  
(f) Drawing.  
(g) Manual Training.  
(h) Agriculture and Surveying.

- B. (1) English.  
(2) Mathematics.  
(3) History and Geography.  
(4) A Modern Indian Language.  
(5) Any *one* or *two* of the following subjects :—  
(a) Samskrit.  
(b) Any other Classical Language.  
(c) A Modern European Language.  
(d) Elementary Physics and Chemistry.  
(e) Botany.  
(f) Drawing.  
(g) Manual Training.  
(h) Agriculture and Surveying.

6. A candidate for admission may present himself for one or more subsequent examinations, provided that he shall on every such occasion satisfy the Registrar that he has fulfilled the conditions laid down in these Regulations, as if he were a candidate appearing for the first time.

7. A certificate signed by the Registrar shall be given to each successful candidate, setting forth the

date of the examination, the optional subjects in which he was examined and the Class in which he was placed

### CHAPTER XXVIIA.

#### **The Previous Examination in Samskrit.**

1. There shall be a Previous Examination in Samskrit held at least twice a year, at such times and on such dates as the Syndicate may prescribe for such candidates as desire to take up one of the optional subjects prescribed in Group A (d) and (e) of Regulation 9 of Chapter XXVIII of the Regulations for the Intermediate Examination, or any of the optional subjects prescribed in Regulation 7 II (iv) of Chapter XXIX (Regulations for the B.A. Examination) in lieu of Samskrit.

2. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application shall be despatched through the prescribed channel, so as to reach the Registrar at least four weeks before the date of the examination.

3. A candidate who fails to pass, may be admitted to a subsequent examination, on a new application.

4. The examination shall be conducted by means of one written paper only.

5. The course prescribed for this examination shall cover some typical declensions and conjugations and simple *samasâs*, and easy selections in prose and poetry.

### CHAPTER XXVIII.

#### **Intermediate Examination in the Faculties of Arts and Science.**

1. The Intermediate Examination shall be held once a year in Benares, at such time and on such dates as the Syndicate may prescribe.

2. No candidate shall be admitted to this examination, unless he shall have fulfilled the conditions contained in Chapter XL (Chapter XIV) for admission to the courses in Arts and Science, and shall have

prosecuted a regular course of study for two years in the University or a constituent College thereof, and unless he has produced satisfactory testimonials in the form prescribed by the Syndicate.

3. (a) Notwithstanding anything contained in Regulation 2, School-masters teaching in a recognised school, Demonstrators serving in the University or any of its constituent Colleges, may be admitted to the examination by the special grace of the Senate, provided that, by the date of the examination, not less than two academical years shall have elapsed since the date of their Matriculation and that the period of continuous service shall have been not less than 18 months.

(b) Before a candidate is permitted by the special grace of the Senate to present himself in any science subject, he shall produce a certificate from the Principal of a constituent College of the University to the effect that he has completed the required course in the College Laboratory.

4. A candidate shall apply to the Registrar in such form as the Syndicate may prescribe. His application and fee shall be despatched through the prescribed channel, so as to reach the Registrar at least four weeks before the commencement of the examination.

5. A candidate who fails to pass, may be admitted to a subsequent Intermediate Examination, on a new application and payment of a further fee, provided he shall have prosecuted a regular course of study for one year in the University or in a constituent College since the date of the last examination.

6. The examination shall be conducted partly by means of papers and partly *vivâ voce*, and in subjects

which admit of it, candidates shall also be required to undergo a practical examination.

7. Notwithstanding anything contained in the Regulations of this Chapter or of Chapter XXVI, a candidate, who at his last appearance at the examination failed in one subject only, shall be admitted to a subsequent examination in that subject only and be declared to have passed the Intermediate Examination on obtaining at least 40 per cent of the total marks in that subject.

8(a) Notwithstanding anything to the contrary contained in Chapter XXIX or Chapter XXXII a candidate who has passed in all the subjects but one, may be allowed to keep terms for the B. A. or B. Sc. Examination and appear for, if otherwise eligible, provided he has passed in the remaining subjects of the Intermediate Examination at least one academical year before he appears for the B. A. or B. Sc. Examination.

(b) A candidate who passes the Intermediate Examination in two or more stages according to the preceding Regulation shall not be classed or be eligible for any University awards connected with the examination.

9. The subjects of examination shall be the following :—

I. Compulsory subjects—

(a) English.

(b) Composition in a Modern Indian Language.

II. Optional subjects—*Three* subjects, confined to one of the following Groups :—

*Group A—*

(c) Samskrit, and

(d), (e) any two of the following subjects,  
*viz. :—*

(1) Another Classical Language.

(2) A Modern European Language.

- (3) Mathematics.
- (4) History.
- (5) Logic.
- (6) Drawing.
- (7) Manual Training.
- (8) Elementary Economics.

**Group B—**

- (c) Mathematics or Biology.  
and

(d), (e) any *two* of the following subjects,  
*viz.* :—

- (1) Physics.
- (2) Chemistry.
- (3) Geology.
- (4) Drawing.
- (5) Manual Training:

Provided that a candidate, who has passed the Previous Examination in Samskrit or has passed the Admission Examination or any examination accepted as equivalent thereto with Samskrit as one of his subjects, may take up, in addition to two optional subjects under (d) and (e), a third optional subject under (d) and (e) in lieu of Samskrit.

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## CHAPTER XXIX.

### **Bachelor of Arts.**

1. The examination for the degree of Bachelor of Arts shall be held once a year in Benares, at such time and on such dates as the Syndicate may prescribe.

2. No candidate shall be admitted to the examination for the degree of Bachelor of Arts, unless he has passed the Intermediate Examination of the University in the Faculty of Arts or of Science, or, in special cases, by permission of the Syndicate, the Intermediate Examination of some other Indian University established by Act of the Legislature,

and unless he has thereafter prosecuted a regular course of study for not less than two years in the University or in a constituent College of the University.

3. Notwithstanding anything contained in Regulation 2, School-masters teaching in a recognised school, Demonstrators serving in the University or any of its constituent Colleges, may be admitted to the examination by the special grace of the Senate, provided that by the date of the examination, not less than two academical years shall have elapsed since the date of their passing the Intermediate Examination, and that the period of continuous service shall have been not less than 18 months.

4. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application and fee shall be despatched through the prescribed channel, so as to reach the Registrar at least four weeks before the commencement of the examination.

5. A candidate, who fails to pass, may be admitted to a subsequent examination for the degree of Bachelor of Arts, on a new application and payment of a further fee, provided he shall have prosecuted a regular course of study for one year in the University or in a constituent College thereof since the date of the last examination.

6. The examination shall be conducted partly by means of papers and partly *vivâ voce*.

7. The subjects of examination shall be the following :—

I. Compulsory subjects —

(i) English.

(ii) Samskrit.

(iii) Composition in a Modern Indian Language.

## II. Optional subjects—

(iv) Any *one* of the following subjects:—

- (a) Any other Classical Language.
- (b) A Modern European Language.
- (c) Philosophy.
- (d) Mathematics.
- (e) Political Economy and Political Philosophy.
- (f) History :

provided that a candidate, who has passed the Previous Examination in Samskrit or has passed the Admission Examination or any examination accepted as equivalent thereto, or has passed the Intermediate Examination with Samskrit as one of his subjects, may take up any one of the optional subjects in lieu of Samskrit.

8. Notwithstanding anything contained in this Chapter or in Chapter XXVI, a candidate who at his last appearance at the examination failed in one subject only, shall be admitted to a subsequent examination in that subject only and be declared to have passed the B. A. Examination on obtaining at least 40 per cent of the total marks in that subject.

9. A candidate who passes the examination in two or more stages according to the preceding Regulation shall not be classed or be eligible for any University awards connected with the examination.

10. A candidate may obtain Honours in any subject, if he passes in the four subjects chosen for the B. A. in the First Class, and if he also passes in a more advanced course in that one of his four subjects which he chooses as his Honours subject. There shall be no Honours course in any Modern Indian Language.



## CHAPTER XXX.

**Master of Arts.**

1. Candidates for the degree of Master of Arts shall be required to pass two examinations, the first called "The Previous Examination for the degree of Master of Arts" and the second "The Final Examination for the Degree of Master of Arts."

2. The Previous Examination shall be held once a year at Benares, at such time and on such dates as the Syndicate may prescribe.

3. The examination shall be open to candidates who have obtained the degree of B.A. or B.Sc. in this University, or, in special cases, by permission of the Syndicate, some other Indian University established by Act of the Legislature, and have, after obtaining that degree, completed a regular course of study for not less than one year in the University or in a constituent College. Any such candidate shall be admitted to the Previous Examination in the subject in which he intends to present himself in the Final Examination.

4. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application and fee shall be despatched through the prescribed channel, so as to reach the Registrar at least four weeks before the commencement of the examination.

5. The examination shall be conducted by means of papers, and may also be *vivâ voce*.

6. Failure to pass or appear at the Previous Examination shall not disqualify the candidate for presenting himself at any subsequent examination, on a new application being forwarded and a further fee paid.

7. The Final Examination shall be held once a year at Benares, at such time and on such dates as the Syndicate may prescribe.

8. The examination shall be open to candidates who have, since passing the Previous Examination, prosecuted a regular course of study for not less than one year in the University, or in a constituent College.

9. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application and fee shall be despatched through the prescribed channel, so as to reach the Registrar at least four weeks before the commencement of the examination.

10. The examination shall be conducted by means of papers, and may also be *vivâ voce*.

11. A candidate may be examined in any *one* of the following subjects:—

- (1) Samskrit.
- (2) English.
- (3) Pâli.
- (4) Any other Classical Language.
- (5) Philosophy.
- (6) History.
- (7) Political Economy and Political Philosophy
- (8) Mathematics.

12. Any Master of Arts may be admitted to the M.A. Examination in any branch other than that in which he was previously examined, without being required to prosecute a further course of study in the University, or in a constituent College thereof.

13. Failure to pass or appear at the Final Examination, shall not disqualify the candidate for presenting himself at any subsequent examination, on a new application being forwarded and a further fee paid. Such a candidate shall not be required to prosecute a further course of study in the University or in a constituent College.

## CHAPTER XXXI.

**Doctor of Letters.**

1. Any Master of Arts of the University may offer himself as a candidate for the degree of Doctor of Letters, provided not less than two years shall have elapsed from the time when he passed the examination for the degree of Master of Arts.

2. Every candidate who intends to supplicate for the said degree shall communicate his intention to do so to the Registrar, and also the special subject chosen by him for an original thesis. No application for admission to the said degree will be entertained, unless it is supported by two members of the Faculty of Arts or two Doctors of the University, who shall have testified that the applicant is, in habits and character, a fit and proper person for the degree. The communication shall be laid before the Faculty of Arts, which, if it approves of the application, shall appoint a Board of three Examiners, and they, if so required, shall advise the candidate as to the amount of knowledge and research required of him.

3. When the candidate has prepared his thesis, he shall forward it to the Registrar for submission to the aforesaid Board, and shall indicate generally, in a preface to his thesis, and specially in notes the sources from which his information is taken, the extent to which he has availed himself of the work of others, and the portions of the thesis which he claims as original; he shall further state whether his research has been conducted independently, under advice, or in co-operation with others, and in what respects his investigations appear to him to tend to the advancement of knowledge.

4. If the thesis mentioned in Regulation 3 is approved by the Board of Examiners, the candidate may further be required to pass an oral or a written

examination, or both examinations, at the discretion of the Board.

5 The Board of Examiners shall submit its opinion to the Faculty which, if it deems fit, shall recommend the candidate to the Senate, through the Syndicate, for the degree of Doctor of Letters.

6. Every candidate shall be at liberty to publish his thesis, and the thesis of every successful candidate shall be published by the University with the inscription: "Thesis approved for the Degree of Doctor of Letters in the Benares Hindu University."

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## CHAPTER XXXII.

### **Bachelor of Science (B. Sc.)**

1. The examination for the degree of Bachelor of Science shall be held once a year at Benares, at such time and on such dates as the Syndicate may prescribe.

2. No candidate shall be admitted to the examination for the degree of Bachelor of Science, unless he has passed the Intermediate Examination of the University in the Faculty of Arts or of Science, or, in special cases, by permission of the Syndicate, the Intermediate Examination of some other Indian University established by Act of the Legislature, and unless he has thereafter prosecuted a regular course of study for not less than two years in the University, or in a constituent College thereof.

3. (a) Notwithstanding anything contained in Regulation 2, School-masters teaching in a recognised school, Demonstrators serving in the University or any of its constituent Colleges, may be admitted to the examination, by the special grace of the Senate provided that by the date of the examination not less

than two academical years shall have elapsed since the date of their passing the Intermediate Examination, and that the period of continuous service shall have been not less than 18 months.

(b) Before a candidate is permitted by the special grace of the Senate to present himself in any Science subject, he shall produce a certificate from the Principal of a constituent College of the University, to the effect that he has completed the required course in the College Laboratory.

4. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application and fee shall be despatched through the prescribed channel, so as to reach the Registrar at least four weeks before the commencement of the examination.

5. A candidate who fails to pass, may be admitted to a subsequent examination for the degree of Bachelor of Science, on a new application and payment of a further fee, provided he shall have prosecuted a regular course of study for one year in the University, or in a constituent College thereof, since the date of the last examination.

6. The examination shall be conducted partly by means of papers and partly *vivâ voce*, and, in subjects which admit of it, candidates shall also be required to undergo a practical examination.

7. Notwithstanding anything contained in this Chapter or in Chapter XXVI a candidate who at his last appearance at the examination failed in one subject only, shall be admitted to a subsequent examination in that subject only, and be declared to have passed the B. Sc. Examination on obtaining at least 40 per cent of the total marks in that subject.

8. A candidate who passes the examination in two or more stages according to the preceding Re-

gulation shall not be classed or be eligible for any University awards connected with the examination.

9. The subjects of examination shall be the following:—

I. Compulsory subjects—

- (i) English (Modern and Practical),
- (ii) Mathematics or Chemistry; and

II. Optional subjects—

(iii) any two of the following subjects, viz.:—

- (a) Mathematics,
- (b) Physics,
- (c) Chemistry,
- (d) Botany (with Vegetable Physiology),
- (e) Zoology (with Animal Physiology),
- (f) Mineralogy,
- (g) Geology, and
- (h) Psychology:

provided that no candidate, who takes up either Mathematics or Chemistry, under sub-division (ii), shall offer the same subject again under sub-division (iii), and no candidate will be permitted to take up Physics, unless he also takes up Mathematics.

## CHAPTER XXXIII.

### Master of Science.

1. Candidates for the degree of Master of Science shall be required to pass two examinations, the first called "The Previous Examination for the Degree of M. Sc." and the second "The Final Examination for the Degree of M. Sc."

2. The Previous Examination shall be held once a year at Benares, at such time and on such dates as the Syndicate may prescribe.

3. The examination shall be open to candidates who have obtained the degree of B.Sc. in this University, or, in special cases, by permission of the Syndi-

cate, in some other Indian University established by Act of the Legislature, and have, after obtaining that degree, completed a regular course of study for not less than one year in the University or in a constituent College. Any such candidate shall be admitted to the Previous Examination in the subject in which he intends to present himself in the Final Examination.

4. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application and fee shall be despatched through the prescribed channel, so as to reach the Registrar at least four weeks before the commencement of the examination.

5. The examination shall be conducted by means of papers, and may also be *vivâ voce*, and, in subjects which admit of it, candidates shall also be required to undergo practical examination.

6. Failure to pass or appear at the Previous Examination shall not disqualify a candidate for presenting himself at any subsequent examination, on a new application being forwarded and a further fee paid.

7. The Final Examination shall be held once a year at Benares, at such time and on such dates as the Syndicate may prescribe.

8. The examination shall be open to candidates who have, since passing the Previous Examination, prosecuted a regular course of study for not less than one year in the University or in a constituent College.

9. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application and fee shall be despatched through the prescribed channel, so as to reach the Registrar at least four weeks before the commencement of the examination.

10. The examination shall be conducted by means of papers, and may also be *vivâ voce*, and, in subjects which admit of it, candidates shall also be required to undergo practical examination.

11. A candidate may be examined in any one of the following subjects :—

- (1) Mathematics.
- (2) Chemistry.
- (3) Physics.
- (4) Zoology.
- (5) Mineralogy.
- (6) Geology.
- (7) Botany.

12. Failure to pass or appear at the Final Examination shall not disqualify a candidate for presenting himself at any subsequent examination, on a new application being forwarded and a further fee paid. Such a candidate shall not be required to prosecute a further course of study in a University or in a constituent College.

#### CHAPTER XXXIV.

##### **Doctor of Science (D. Sc.)**

1. A Master of Arts, who has taken that degree in Mathematics, or any Master of Science, may offer himself as a candidate for the degree of Doctor of Science, provided not less than two years shall have elapsed from the time when he passed the examination for the degree of Master of Arts or Master of Science.

2. Every candidate who intends to supplicate for the said degree, shall communicate his intention to do so to the Registrar, and the communication shall include a statement of the contributions, published or accepted for publication, to science on which the applicant's claim to the degree is based, together with one or more copies of any thesis,



whether in type or in manuscript, embodying the result of research, or showing evidence of his own work which the applicant may desire to submit in support of the application.

3. The candidate shall indicate, generally, in a preface to his thesis, and specially in notes, the sources from which his information is taken, the extent to which he has availed himself of the work of others and the portions of the thesis which he claims as original; he shall further state whether his research has been conducted independently, under advice, or in co-operation with others, and in what respects his investigations appear to him to tend to the advancement of science.

4. No application shall be entertained, unless two Members of the Faculty of Science, or two Doctors of the University, shall have testified, to the satisfaction of the Syndicate, that, in habits and character, the candidate is a fit and proper person for the degree. The communication shall be laid before the Faculty of Science, which, if it approves of the application, shall appoint a Board of three Examiners, to whom the thesis of the candidate shall be submitted.

5. If the thesis mentioned in Regulation 2 is approved by the Board of Examiners, the candidate may further be required to pass an examination, which may be written, oral, or practical, at the discretion of the Board.

6. The Board of Examiners shall submit its opinion to the Faculty which, if it deems fit, shall recommend the candidate to the Senate, through the Syndicate, for the degree of Doctor of Science.

7. Every candidate shall be at liberty to publish his thesis, and the thesis of every successful candidate shall be published by the University, with the inscription, "Thesis approved for the Degree of Doctor of Science in the Benares Hindu University."

## CHAPTER XXXIVA.

**Bachelor of Science (Engineering).**

1. Before being admitted to the Engineering College of the Benares Hindu University, a candidate, who wishes to take the courses for the degree of Bachelor of Science (Engineering), must have passed the Intermediate Examination with Mathematics, Physics and Chemistry of the Benares Hindu University or of any other Indian University established by Act of the Legislature or the corresponding examination, with the same subjects, of any other University in a British Province or any Native State which, on the advice of the Syndicate, shall at any time be recognised by the Government of India as qualifying for admission. He must also produce a certificate, signed by the Principal of his College, that his conduct and behaviour have been satisfactory.

2. The Degree Course covers in all five years, the first two years being devoted to the Intermediate Course in Engineering, the third and the fourth years to the Degree Course, and the fifth year solely to practical training or research.

3. Candidates will be required to pass four examinations:

First year ... Intermediate Examination, Part I.

Second year... Intermediate Examination, Part II.

Third year ... Degree Examination, Part I.

Fourth year... Degree Examination, Part II.

4. Before being admitted to each one of the examinations, the candidate must produce certificates to show that he has satisfactorily completed the course prescribed for that examination, that his conduct in the College and in the Workshops has been satisfactory, that he has obtained not less than 60 % of the total marks awarded for sessional work in the Shops, Engineering Laboratories and at any

special Workshop Examinations that may have been held.

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#### INTERMEDIATE EXAMINATION, PART I.

5. The Intermediate Examination, Part I, shall be held once a year, at Benares, at such time and on such dates as the Syndicate may prescribe.

6. No candidate shall be admitted to this examination, unless he has prosecuted a regular course of study for not less than one year in the Engineering College of this University.

7. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application and fee shall be despatched through the prescribed channel, so as to reach the Registrar at least thirty days before the commencement of the examination.

8. A candidate who fails to pass, may be re-admitted to a subsequent examination, on a new application and payment of a further fee, provided he shall have prosecuted a regular course of study for one year in the Engineering College of this University, since the date of the last examination.

9. The subjects of the examination shall be :

1. Mathematics.
  2. Engineering Physics.
  3. Engineering Chemistry.
  4. Building and Surveying,
  5. Engineering and Metallurgy.
  6. Mechanical Drawing.
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#### INTERMEDIATE EXAMINATION, PART II.

10. The Intermediate Examination, Part II, shall be held once a year, at Benares, at such time and on such dates as the Syndicate may prescribe.

11. No candidate shall be admitted to this examination, unless he has passed the Intermediate Exam-

nation, Part I, and prosecuted a regular course of study thereafter for not less than one year in the Engineering College of this University:

12. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application and fee shall be despatched through the prescribed channel, so as to reach the Registrar at least thirty days before the commencement of the examination.

13. A candidate who fails to pass, may be re-admitted to a subsequent examination, on a new application and payment of a further fee, provided he shall have prosecuted a regular course of study for one year in the Engineering College of the University, since the date of the last examination.

14. The subjects of the examination shall be :

1. Mathematics.
2. Heat Engines.
3. Applied Mechanics.
4. Practical Geometry.
5. Electrical Engineering.
6. Mechanical Drawing.

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#### BACHELOR OF SCIENCE (ENGINEERING)

##### EXAMINATION, PART I.

15. The examination for the degree of Bachelor of Science (Engineering), Part I, shall be held once a year, at Benares, at such time and on such dates as the Syndicate may prescribe.

16. No candidate shall be admitted to the above examination, unless he has passed the Intermediate Examination, Part II, of this University, and prosecuted a regular course of study thereafter for not less than one year in the Engineering College of this University.

17. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His appli-

cation and fee shall be despatched through the prescribed channel, so as to reach the Registrar at least thirty days before the commencement of the examination.

18. A candidate who fails to pass, may be re-admitted to a subsequent examination, on a new application and on payment of a further fee, provided he shall have prosecuted a regular course of study for one year in the Engineering College of the University, since the date of the last examination.

19. The examination shall be conducted by means of papers, and may include a *vivâ voce* test, in subjects which admit of it.

20. The subjects of examination shall be :

1. Strength of Materials.
2. Theory of Structures.
3. Theory of Machines.
4. Hydraulics.
5. Heat Engines.
6. Electrical Engineering.
7. Mechanical Drawing.

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BACHELOR OF SCIENCE, ENGINEERING  
EXAMINATION (PART II).

21. The examination for the degree of Bachelor of Science (Engineering), Part II, shall be held once a year, at Benares, at such time and on such dates as the Syndicate may prescribe.

22. No candidate shall be admitted to the above examination, unless he has passed the Degree Examination (Engineering), Part I, of this University, and prosecuted a regular course of study thereafter for not less than one year in the Engineering College of this University.

23. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application and fee shall be despatched through the

prescribed channel, so as to reach the Registrar at least thirty days before the commencement of the examination.

24. A candidate who fails to pass, may be re-admitted to a subsequent examination, on a new application and payment of a further fee, provided he shall have prosecuted a regular course of study for one year in the Engineering College of the University, since the date of the last examination.

25. The examination shall be conducted by means of papers, and may include a *vivâ voce* test, in subjects which admit of it.

26. The subjects of the examination shall be :

IN THE MECHANICAL BRANCH.	IN THE ELECTRICAL BRANCH.
1. Strength of Materials.	1. Strength of Materials.
2. Theory of Structures.	2. Electrical Testing of Materials.
3. Structural Design.	3. Theory of Structures.
4. Hydraulics	4. Structural Design.
5. Hydraulic Machines.	5. Hydraulics.
6. Theory of Machines.	6. Hydro-Electrical Machines.
7. Machine Design.	7. Theory of Machines.
8. Heat Engines.	8. Dynamo Design.
9. Mechanical Drawing.	9. Heat Engines.
10. Estimating.	10. Electrical Engineering.
11. Electrical Engineering.	11. Electrical Estimating.

27. No candidate shall be allowed to present himself for examination in both of these Branches in one year. All the subjects in each Branch are compulsory for that Branch.

#### FIFTH YEAR'S COURSE.

28. Candidates who have passed Part II of the examination for the degree of Bachelor of Science (Engineering), shall be admitted to the degree of Bachelor of Science (Engineering) only on producing evidence which shall satisfy the Syndicate that they have spent not less than one year in practical work or research.

## CHAPTER XXXV.

**Bachelor of Law.**

1. Candidates for the degree of LL.B. shall be required to pass two examinations in Law, the first called "The Previous for the Degree of LL. B." and the second, "The Final for the Degree of LL. B."

2. The Previous Examination shall be held once a year in Benarés, at such time and on such dates as the Syndicate may prescribe.

3. The examination shall be open to candidates who have obtained the degree of B.A., or B.Sc., in this University, or, in special cases, by permission of the Syndicate, in some other Indian University established by Act of the Legislature, and have, after obtaining one of those degrees, prosecuted a regular course of study for one year in the University.

4. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application and fee shall be despatched, so as to reach the Registrar at least four weeks before the commencement of the examination.

5. Failure to pass the Previous Examination shall not disqualify the candidate for presenting himself at any subsequent examination, on a new application being forwarded and a further fee paid.

6. The examination shall be conducted by means of papers, and may also be *vivâ voce*.

7. Candidates shall be examined in the following subjects:—

(1) Constitutional Law of England and of India.

(2) Jurisprudence, with Elements of Roman Law.

(3) The Law of Contracts and Torts.

(4) The Law of Crimes and Criminal Procedure.

(5) The Law relating to Succession of Property —Testamentary and Intestate—other than Hindu and Muhammadan Laws on the subject.

8. The Final Examination shall be held once a year in Benares, at such time and on such dates as the Syndicate may prescribe.

9. The examination shall be open to candidates who have, since passing the Previous Examination, prosecuted a regular course of study for one year in the University.

10. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application and fee shall be despatched through the prescribed channel, so as to reach the Registrar at least four weeks before the commencement of the examination.

11. The examination shall be conducted by means of papers, and may also be *vivâ voce*.

12. Every candidate shall present himself for examination in the following subjects:—

(1) The Law of Civil Procedure, Limitation and Evidence.

(2) Hindu Law.

(3) Muhammadan Law.

(4) Equity, with special reference to the Law of Trusts and Specific Relief.

(5) The Law relating to Transfer of Property, and the Law of Easements.

(6) The Law relating to Land Tenures, Rent and Revenue.

(7) The Law relating to Companies and Corporations.

13. Candidates will be expected to study Hindu and Muhammadan Laws, with special reference to original authorities, or translations thereof. An



additional paper in each of these subjects will be set, at least one of which each candidate will be required to answer.

14. Failure to pass the Final Examination will not disqualify the candidate from presenting himself at any subsequent examination, on a new application being forwarded and a further fee paid.

15. The LL.B. course shall not be studied synchronously with the M.A. or M.Sc. course.

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## CHAPTER XXXVI.

### Master of Law.

1. An examination for the degree of Master of Law may be held in Benares, at such time and on such dates as the Syndicate may prescribe.

2. The examination shall be open to candidates who, not less than two years previously, have obtained the degree of Bachelor of Law in this University, or, in special cases, by permission of the Syndicate, who have obtained the corresponding degree in some other Indian University established by Act of the Legislature.

3. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application and fee shall be despatched through the prescribed channel, so as to reach the Registrar at least six months before the examination.

4. Failure to pass the examination shall not disqualify the candidate from presenting himself at any subsequent examination, on a new application being forwarded and a further fee paid.

5. The examination for the degree of Master of Law shall be conducted by means of papers, and may also be *viva voce*.

6. Candidates for the degree of Master of Law shall be examined in the following subjects :—

(1) Jurisprudence and Principles of Legislation.

(2) Hindu Law.

(3) Principles of Equity, and any *three* of the following :—

(a) The Law of Contracts and Torts.

(b) The Law relating to Transfer of Property, and the Law of Easements

(c) Roman Law.

(d) Muhammadan Law.

(e) International Law.

(f) The Law of Testamentary and Intestate Succession.

(g) Constitutional Law and Legal History.

7. The examination in Hindu Law and in Muhammadan Law shall comprise questions having special reference to the original authorities.

## CHAPTER XXXVII.

### Doctor of Law.

1. A Master of Law of the University may offer himself as a candidate for the degree of Doctor of Law, provided not less than one year shall have elapsed from the time when he passed the examination for the degree of Master of Law.

2. Every candidate shall state in his application the special subject, within the purview of the Regulations for the degree of Master of Law, upon a knowledge of which he rests his qualification for the Doctorate, and shall, with the application, transmit three copies, printed or type-written, of a thesis which he has composed upon some branch of law, or of the history or philosophy of law.

The candidate shall indicate, generally, in a preface to his thesis, and specially in notes, the sources from which his information is taken, the extent to which he has availed himself of the work of others, and the portions of the thesis which he claims as original ; he shall further state whether his research has been conducted independently, under advice, or in co-operation with others, and in what respects his investigations appear to him to advance the study of law.

3. Every candidate may also forward with his application three printed copies of any original contribution or contributions to the advancement of the science or study of law, whether published conjointly or independently, upon which he relies in support of his candidature.

4. No application shall be entertained, unless two members of the Faculty of Law or two Doctors of Law shall have testified, to the satisfaction of the Syndicate, that, since graduating as a Bachelor of Law, the candidate has practised his profession with repute for five years, and that, in habits and character, he is a fit and proper person for the degree of Doctor of Law.

5. If the application be entertained, the Faculty shall appoint a Board of three Examiners, to whom the thesis mentioned in Regulation 2, and the original contribution, if any, mentioned in Regulation 3, shall be submitted.

6. If the thesis mentioned in Regulation 2 is approved by the Board of Examiners, the candidate may further be required to pass an examination which may be written or oral, or both, at the discretion of the Board of Examiners.

7. The Board of Examiners shall submit its opinion to the Faculty which, if it deems fit, shall recommend the candidate to the Senate, through the Syndicate, for the degree of Doctor of Law.

8. Every candidate shall be at liberty to publish his thesis, and the thesis of every successful candidate shall be published by the University, with the inscription: "Thesis approved for the Degree of Doctor of Law in the Benares Hindu University."

## CHAPTER XXXVIII.

### The Faculty of Oriental Learning.

1. The Faculty of Oriental Learning shall, so far as funds admit, consider and propose such measures as it may, from time to time, deem necessary for:—

- (a) the promotion of the study of and researches in the languages, learning and sciences of Ancient India, and for the diffusion and preservation of important works therein;
- (b) the enrichment of the modern languages of India, and for the promotion of their study; and
- (c) the promotion of the study of and research in such other languages of the East as the Senate may, from time to time, recommend.

It will, for the present, undertake work to secure objects (a) and (b).

2. There shall be four examinations in the Faculty, *viz.*:—

- (a) *Praveshika Pariksha* (Examination for Admission to the studies in the said Faculty);
- (b) *Madhyama Pariksha* (the Intermediate Examination in the Faculty of Oriental Learning);
- (c) *Shastri Pariksha* (the Examination for the Degree of Shastri); and
- (d) an Examination for the Degree of *Shastra-charya*.

3. The examinations shall be conducted by means of papers or *vivâ voce*, or both, and, in subjects which

admit of it, candidates shall be required to undergo practical examination.

4. An examination (*Praveshika Pariksha*) for admission to the studies of the Faculty shall be held in the manner prescribed in Regulation 22 of Chapter XL (Regulation 20 of Chapter XIV). Admission to this examination shall be governed by the provisions contained in Regulations 18 to 21 of Chapter XL (Regulations 16 to 19 of Chapter XIV).

5. The subjects for the *Praveshika Examination* shall be the following :—

(i) Samskrit.

(ii) Hindi, or one of the following Modern Indian Languages, *viz.*, Bengali, Gujrati, Marathi, Oriya, Tamil, and Telegu.

(iii) Mathematics } in a Modern  
(iv) History and Geography } Indian Lan-  
guage.

or  
(iii) Further course in Samskrit }  
Grammar and Literature } in Samskrit.

(iv) Elementary Logic }

The candidate may also offer any one of the following subjects, *viz.* :—

(a) English.

(b) Drawing and Manual Training.

(c) Agriculture and Surveying.

6. The Intermediate Examination in the Faculty of Oriental Learning (*Madhyama Pariksha*) shall be held once a year at Benares, at such time and on such dates as the Syndicate may prescribe, and shall be open to all candidates who have prosecuted a regular course of study for not less than two years in the University, or a constituent College thereof, after admission into the University or the College aforesaid, or who fulfil the conditions laid down in Regulation 17 of Chapter XL (Regulation 15 of Chapter XIV).

7. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application shall be despatched through the proper channel, so as to reach the Registrar not less than four weeks before the commencement of the examination.

8. The subjects for the said Intermediate Examination (*Madhyama Pariksha*) shall be the following:—

(i) Samskrit (Language and Literature).

(ii) Hindi, or one of such other Modern Indian Languages, as the Syndicate may, from time to time, permit. Arrangements for instruction in other important Modern Indian Languages will be made, whenever required and so far as funds will permit.

(iii) Any one of the following subjects, viz.:—

(a) Further course in Samskrit Grammar and Literature.

(b) A School of Indian Philosophy.

(c) Hindu Law and Jurisprudence.

(d) Hindu Astronomy and Mathematics.

(e) The Ayurvedic System of Medicine, including an elementary knowledge of Chemistry, Botany and Physics.

} to be answered  
in Samskrit.

or

any three subjects out of the following Groups:—

Group A—

(a) English.

(b) History and Geography.

(c) Philosophy.

(d) Mathematics.

Group B—

(a) English.

(b) Mathematics.

(c) Physics.

(d) Chemistry.

(e) Botany.

Group C---

(a) Hindu Medicine.

(b) Botany.

(c) Physiology.

(d) Chemistry.

9. For students taking up subjects in any one of the last two groups aforesaid, the medium of instruction in all subjects, except Samskrit and English, will be Hindi; but they will be expected to possess a knowledge of English sufficient to enable them to follow English nomenclature and technical terms.

10. The examination for the degree of *Shastri* shall be held once a year at Benares, at such time and on such dates as the Syndicate may prescribe, and shall be open to candidates who have prosecuted a regular course of study for not less than three years in the University, or a constituent College thereof, after passing the Intermediate Examination (*Madhyama Pariksha*), or who may be admitted under the provisions contained in Regulation 23 of Chapter XL (Regulation 21 of Chapter XIV).

11. A candidate shall apply to the Registrar in such form as the Syndicate may prescribe. His application shall be despatched through the prescribed channel, so as to reach the Registrar at least four weeks before the commencement of the examination.

12. The subjects for the said examination for the degree of *Shastri* shall be the following :—

(i) Samskrit Language and Literature (including Vedic Samskrit).

(ii) Hindi, or one of such other Modern Indian Languages as the Syndicate may, from time to time, permit. So far as possible, any

other of the principal Modern Indian Languages will be permitted to be taken in lieu of Hindi.

(iii) Any one of the following subjects, *viz.* :—

- (a) A further course in Samskrit Grammar.
- (b) A further course in Samskrit Literature.
- (c) A further course in the Vedas and Vedic Samskrit.
- (d) A School of Indian Philosophy.
- (e) Hindu Law and Jurisprudence.
- (f) Hindu Astronomy and Mathematics.
- (g) The Ayurvedic system of Medicine, with Botany, Physiology and Chemistry (the last three in the Modern Indian Language).
- (h) History, Palæography and Epigraphy (with some knowledge of Prakrit and Pali).
- (i) Prakrit and Pali. } with some knowledge of Philology and Phonetic Laws.
- (j) English.

13. Every candidate for the degree of *Shastri-charya* shall be required to—

- (i) produce a certificate that he has taken the degree of *Shastri* in the University;
- (ii) prove to the satisfaction of the Syndicate that, for not less than two years after taking the above degree, he has pursued an advanced course of study, in any one of the subjects (a) to (i) specified in the preceding Regulation;
- (iii) submit a thesis in Samskrit, on a subject previously accepted by the Faculty of Oriental Learning, showing evidence of original work, for approval by a Board of three Examiners appointed by the said Faculty; and



(iv) pass an oral or a written examination, or both examinations, as the Board of Examiners may require, on the subject of his thesis, and cognate subjects.

14. The Board of Examiners shall submit its opinion to the Faculty which, if it deems fit, shall recommend the candidate to the Senate, through the Syndicate, for the degree of *Shastracharya*.

15. Every candidate shall be at liberty to publish his thesis, and the thesis of every successful candidate shall be published by the University, with the inscription: "Thesis approved for the Degree of *Shastracharya* in the Benares Hindu University."

## CHAPTER XXXIX.

### The Faculty of Theology.

#### (a) General.

1. The Faculty of Theology shall be in charge of the religious instruction of the Hindu students of the University, and it shall also organize studies in religion and the examinations therein.

#### (b) Examination.

1. Candidates for admission to the studies of the Faculty of Theology (*Dharma*) must be Hindus, and must have passed the *Praveshika Pariksha*, that is, the admission examination of the Faculty of Oriental Learning of the University, or, have otherwise fulfilled the conditions laid down in Regulation 24 of Chapter XL (Regulation 22 of Chapter XIV).

2. There shall be 5 examinations in this Faculty:—the *Madhyama Pariksha*, which is an Intermediate Examination, and two sets of examinations for degrees, namely, the—

*Smriti Ratna Pariksha.*

*Smriti Sagar Pariksha.*

*Dharma Shastri Pariksha.*

*Dharmacharya Pariksha.*

3. The examinations shall be conducted by means of papers, and shall also be *vivâ voce* and practical.

*Intermediate Examination.*

4. The subjects of examination for the *Madhyama Pariksha* shall be the following :—

(i) Samskrit :—

(a) Shruti (Selections) - optional, and open to those candidates only, who, according to accepted Hindu usage, are qualified to study the Vedas.

(b) Smriti (Selections).

(c) Purana and Itihasa (Selections).

(ii) Grihya Sutra.

(iii) Jyotish, (Astrology) (Elementary).

(iv) Dasa-Karma Paddhati—(Rituals and Ceremonials)—optional, and open to those candidates only, who, according to accepted Hindu usage, are qualified to officiate at Hindu religious ceremonies and rituals.

5. The *Madhyama Pariksha* shall be held once a year, at Benares, at such time and on such dates as the Syndicate may prescribe, and shall be open to all candidates who have prosecuted a regular course of study for not less than two years in the University, or constituent College thereof, after admission into the University or the College aforesaid.

6. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application shall be despatched through the prescribed channel, so as to reach the Registrar at least four weeks before the commencement of the examination.

*The Degree Examinations.*

7. The examination for the degree of Smriti Ratna, shall be held once a year, at Benares, at such time and on such dates as the Syndicate may pre-

scribe, and shall be open to all candidates who have prosecuted a regular course of study for not less than three years in the University, or a constituent College thereof, after having either passed the Intermediate Examination, or fulfilled the conditions laid down in Regulation 23 of Chapter XL (Regulation 21 of Chapter XIV).

8. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application shall be despatched through the prescribed channel, so as to reach the Registrar at least four weeks before the commencement of the examination.

9. The subjects for the said examination for the degree of Smriti Ratna shall be the following :—

(i) Veda (candidate's own Shâkhâ or Recension, with commentary and Angas or subsidiary sciences).

(ii) Smriti (Grihya Sutra, and the principal Smriti Texts).

(iii) Purana and Itihâsa.

(iv) The Six Systems of Indian Philosophy.

(v) Nyâya (in greater detail).

(vi) Purva-Mîmâmsa (in greater detail).

(vii) Sâyana's introduction to Rîgveda Bhâshya.

(viii) Bhagawadgita, with commentaries.

(ix) Mitâksharâ.

10. Every candidate for the degree of Smriti Sagar shall be required to—

(i) produce a certificate that he has taken a degree of Smriti Ratna in the University ;

(ii) prove to the satisfaction of the Syndicate that, for not less than 2 years after taking the degree aforesaid, he has pursued an advanced course of study in the subjects prescribed for the degree of Smriti Ratna ;

(iii) pass an examination, *vivâ voce* or written, or both, as the Board of Examiners may require, in the subjects mentioned above.

*The Dharma Shâstri and the Dharmâchârya  
Examinations.*

11. The examination for the degree of Dharma Shastri shall be held annually at Benares, at such time and on such dates as the Syndicate may prescribe, and shall be open to those candidates who desire and are competent, according to the accepted usage of the community, to officiate at Hindu religious ceremonies and who have prosecuted a regular course of study for not less than three years in the University, or a constituent College thereof, after having either passed the Intermediate Examination or fulfilled the conditions laid down in Regulation 23 of Chapter XL (Regulation 21 of Chapter XIV).

12. A candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application shall be despatched through the proper channel, so as to reach the Registrar at least four weeks before the commencement of the examination.

13. The subjects for the said examination shall be --

I. All the subjects prescribed for the degree of Smriti Ratna.

II. Brahmana and Shrauta Sutra, of the candidate's own Shâkhâ (along with the Paddhati of the principal Yajnas).

III. Shatapatha Brahmana.

IV. Shulva Sutra—practical knowledge of the making of sacrificial altars (Vedis and Kundas).

14. Every candidate for the degree of Dharmacharya shall be required to—

(i) produce a certificate that he has taken the degree of Dharma Shastri in the University ;

(ii) prove to the satisfaction of the Syndicate that for not less than two years after taking the above degree, he has pursued

an advanced course of study in the subjects prescribed for the degree of Dharma Shastri :

- (iii) submit a thesis' in Samskrit on a subject previously accepted by the Faculty of Theology in the subjects of the candidates' own shakha (*c. g.*, Samhita Brahmana, Aranyakas, Upanishads, Sutras and Puranas studied by the candidate in the previous examinations) showing evidence of original work for approval by a Board of three Examiners appointed by the said Faculty ; and
- (iv) pass an oral or a written examination, or both examinations, as the Board of Examiners may require, on the subject of his thesis and cognate subjects.

15. The Board of Examiners shall submit its opinion to the Faculty which if it deems fit, shall recommend the candidate to the Senate through the Syndicate for the degree of Dharmacharya.

16. Every candidate shall be at liberty to publish his thesis and the thesis of every successful candidate shall be published by the University with the inscription "Thesis approved for the Degree of Dharmacharya in the Benares Hindu University."

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#### NOTE.

The following Chapter repeats Regulations for admission to University courses which are found in the appropriate Chapters. These Regulations have been collected in this place for the convenience of those who seek admission, and in order to show in a single Chapter the Regulations which are governed by the proviso to Section 18(5) of the Act of Incorporation.

## CHAPTER XL.

**Admission of Students.**

1. Every candidate for any degree or diploma granted by the University shall, except when exempted under any of these Regulations, be required to pass the examination prescribed by these Regulations for admission to the University for the Faculty concerned, before entering upon the course prescribed for such degree or diploma. Chapter XIV.

2. Every male candidate for any degree or diploma granted by the University shall have completed sixteen years of age, within 30 days of his entering upon the course prescribed for such degree or diploma; provided that, in the case of candidates for the courses in the Faculties of Theology and Oriental Learning, the age fifteen may be substituted for sixteen. Chapter XIV.

*A.—Admission to the University courses in Faculties other than Theology and Oriental Studies.* Chapter XIV.

3. A candidate may gain admission to the University courses in Faculties other than those of Theology and Oriental Learning, either (i) by passing the Admission Examinations in Arts and Science prescribed in Chapter XXVII of these Regulations, or (ii) by passing any one of the other examinations as specified below, and fulfilling such other conditions as the Syndicate may impose.

(i) *Conditions to be fulfilled by candidates for the Admission Examinations in Arts and Science.* Chapter XIV.

4. A candidate for the Admission Examinations in Arts and Science shall be either a pupil of a recognised school, or a private candidate.

5. When a school is situated in British India, the conditions regarding its recognition for the purpose Chapter XVII.

of sending up candidates for the Admission Examinations of the University shall be as follows:—

(a) The school shall apply to such officer and in such form, and shall specify such particulars as shall be prescribed by the Local Government of the Province or place in which it is situated, and the Local Government, if it thinks fit, and after such inquiry as it may deem necessary, may recognise the school for the purpose of sending up candidates.

(b) If the application is granted, the school shall be entered on the list of schools so recognised, and a copy of the entry shall be sent to the Registrar of the University.

Chapter  
XVII.

(c) No school so recognised shall, during the period that it remains so recognised, prepare or send up candidates for the Matriculation or Admission Examination of any other University; provided that, with the special consent of the Syndicate, it may prepare and send up candidates for the *Praveshika Pariksha*.

(d) The Local Government may at any time remove any school from the list of recognised schools.

(e) A copy of the order removing a school from the list of recognised schools shall forthwith be sent to the Registrar of the University.

6. When a school is situated in the territory of an Indian Prince or Chief, the procedure governing its recognition for the purpose of sending up candidates for the Admission Examination of the University shall be as follows:—

(a) The Government of India may direct in respect of any State that recognition of a school

by the Government of that State shall (subject, in any case, to revision by the Government of India) be recognition for the purpose of sending up candidates.

- (b) If a school situated in a State, regarding which the Government of India have made no such direction, desires recognition, the Government of India may, if it thinks fit, and after such enquiry as it may deem necessary, empower the Government of that State to recognise that school for the purpose of sending up candidates.
- (c) In either case, the conditions (a), (b), (c) (d) and (e) of Regulation 5 of Chapter XL shall be fulfilled, save that (subject to revision by the Government of India of the granting and retention of recognition) the Government of the State concerned shall be substituted for the Local Government.

7. The Syndicate shall have power, from time to time, to prescribe further conditions for recognition to be complied with by schools which fulfil the conditions required under the two preceding Regulations. Chapter XVII.

8. A candidate shall be deemed to be a pupil of a recognised school when he has studied in it or in more than one recognised school for at least two years immediately previous to his admission to the University, or, if local rules regarding study, examination, etc., demand, for a longer period. Such a candidate shall apply, through the Headmaster of the school where he is studying, to the Registrar, in such form as the Syndicate may prescribe. His application and fee shall be despatched, so as to reach the Registrar at least six weeks before the date of the commencement of the Admission Examination. The fee shall be Rs. 10. Chapter XIV.



Chapter  
XIV.

9. A private candidate is one who has not studied in any school or other educational institution for at least one year immediately previous to his admission to a University examination.

Chapter  
XIV.

10. When a private candidate is a resident of British India, he shall be certified by an Inspector of Schools appointed by the Local Government of the Province or place where he resides, or by some other officer empowered by the Local Government for this purpose, to be a fit person to appear at the Admission Examinations. The Syndicate shall, ordinarily, require that, in cases where a candidate has at any time previously studied in a school or an institution, a satisfactory certificate from the head of that school or institution shall be forwarded by the certifying officer.

Chapter  
XIV.

11. When a private candidate is a resident of the territory of an Indian Prince or Chief, he must, (a) if the Government of India have made the direction specified in Regulation 6 (a) of Chapter XL regarding that State, be certified by the educational authority of that State to be a fit person to appear at the Admission Examination ; or, (b) if no such direction has been made regarding that State, be similarly certified by an officer empowered by the Government of India to be so qualified. In either case, if the candidate has at any time previously studied in a school or an institution, the certificate prescribed under the last sentence of Regulation 10 of Chapter XL shall ordinarily be required.

Chapter  
XIV.

12. A private candidate shall apply to the Registrar, in such form as the Syndicate may prescribe. His application and fee shall be despatched through the prescribed channel, so as to reach the Registrar at least six months before the commencement of the Admission Examination ; provided that, for the examination of 1919, the period for sending applications

to appear as private candidates shall be three months before the commencement of the examination. The fee shall be Rs. 10.

Chapter  
XIV.

13. Whether a candidate is a pupil of a recognised school or a private candidate, he shall satisfy the Syndicate as to his fitness for admission to the courses of the University by passing the Admission Examination, which shall be held at Benares, at times prescribed from time to time by the Syndicate.

(ii) *Conditions to be fulfilled by candidates who pass some other examination.*

14. The Syndicate may admit to the University courses a candidate who has passed the Matriculation Examination of any Indian University established by Act of the Legislature or any School-Leaving Certificate Examination held in a British Province or in a State, which, on the advice of the Syndicate, shall at any time be recognised by the Government of India as qualifying for admission, or any one of the following examinations :—

Chapter  
XIV.

the Senior Oxford Local Examination.

the Senior Cambridge Local Examination.

the Final Examination prescribed for European Schools.

the Diploma Examination of a Chief's College.

The Syndicate may also so admit candidates coming from outside India who produce certificates of having passed examinations which, in the opinion of the Syndicate, are equivalent to the above-mentioned examinations, or who have, in the opinion of the Syndicate, if necessary, after examination, attained a degree of knowledge equivalent to that expected at the Admission Examination.

Chapter  
XIV

15. The Syndicate shall have power, from time to time, to prescribe further conditions to be complied

with by the candidates, and, in especial, to prescribe further tests for candidates who have passed these examinations ; provided that, if any such further test is held at a centre other than Benares, the arrangements (especially those regarding the supervision of the examination) shall be made in conjunction with the Local Government or the Government of the State concerned.

Chapter  
XIV.

16. In special cases, by permission of the Syndicate, a candidate may be admitted to the B. A. and B. Sc. courses of the University, if he has passed the Intermediate Examination of some other Indian University established by Act of the Legislature.

*B.—Admission to University courses in the Faculties of Theology and Oriental Learning.*

Chapter  
XIV.

17. A candidate may gain admission to the University courses in the Faculty of Oriental Learning, either (i) by fulfilling the conditions prescribed in Regulations 4 to 8 of Chapter XL, save as regards the payment of fee, and by passing the Admission Examinations in Arts and Science, with Samskrit as one of the subjects, or (ii) by fulfilling the conditions prescribed in Regulations 14 and 15 of Chapter XL and passing any of the examinations mentioned in Regulation 14, with Samskrit as one of the subjects, or (iii) by passing the *Praveshika Pariksha*, or (iv) by passing—

the *Prathama* Examination of the Samskrit College, Benares ;

*Prajna* Examination of the Punjab University ; provided that candidates under (i) and (ii) of this Regulation, who have not taken Samskrit as one of the subjects of their examination, may be admitted on satisfying the Syndicate, as the result of an examination, that they possess a sufficient knowledge of Samskrit.

18. In case (iii), a candidate either shall be a pupil of a recognised school which, under the provision to Regulation 5 (c) of Chapter XL, is permitted to prepare and send up candidates for the *Praveshika Pariksha*, or, if he is not a pupil of such a recognised school, shall produce a certificate, as provided for under Regulations 19 and 20 of Chapter XL, that he is a fit person to be sent up for the *Praveshika Pariksha*. Chapter XIV.

19. When the candidate is a resident of British India, the certificate specified in Regulation 18 of Chapter XL shall be signed by an officer, empowered for this purpose by the Local Government of the Province or place where the candidate resides or studies. Chapter XIV.

20. When the candidate is a resident of the territory of an Indian Prince or Chief, the certificate specified in Regulation 18 of Chapter XL shall be signed by the educational authority of that State, if the direction provided for in Regulation 6 (a) of Chapter XL has been made in respect of that State; otherwise, it shall be signed by an officer empowered for this purpose by the Government of India. Chapter XIV.

21. A candidate for the *Praveshika Pariksha* shall apply to the Registrar, in such form as the Syndicate may prescribe. His application shall be despatched through the prescribed channel, so as to reach the Registrar at least six weeks (and, in the case of private candidates, six months) before the commencement of the examination provided that for the examination of the year, 1919 the period for sending applications to appear as private candidates shall be three months before the commencement of the examination. Chapter XIV.

22. The *Praveshika Pariksha* shall be held, at times prescribed from time to time by the Syndicate, at Benares, and at such other centres as the Syndicate Chapter XIV.

may from time to time direct: provided that, at centres other than Benares, the arrangements (especially those regarding the supervision of the examinations) shall be made in conjunction with the Local Government or the Government of the State concerned.

Chapter  
XIV.

23. The Syndicate may admit to the *Shastri* course students who have passed the *Madhyama* Examination of the Benares Samskrit College.

Chapter  
XIV.

24. Candidates for admission to the courses of the Faculty of Theology (*Dharma*) must be Hindus, and must have fulfilled the conditions prescribed in Regulation 17 (*iii*) or (*iv*), or in Regulation 23 of Chapter XL.

### *C. Inter-University Regulations.*

25. Notwithstanding anything contained in these Regulations, a student, who is qualified under the foregoing Regulations for admission to the University and who is a member of some other Indian University, shall not be admitted to the University or any constituent College thereof, without the production of:—

(1) a leaving or transfer certificate signed by the Principal of his last College, and certifying to the satisfactory conduct of the student and mentioning the highest examination he has passed, and

(2) a certified copy of all the entries against his name in the Enrolment Register of his University, if such a copy is obtainable.

26. A student of some other Indian University shall on any case be admitted only at the beginning of the particular course which he proposes to take in the University.

## CHAPTER XLI.

**Licentiate of Teaching.**

1. The examination shall be open to a graduate who has been admitted to the degree of B.A. or B.Sc. in this University, or, in special cases, by permission of the Syndicate, in some other Indian University established by Act of the Legislature, provided he has studied for the year previous to his examination at a constituent College affiliated in the branch of Teaching.

2. The examination shall be both in the Theory and Practice of Teaching. In the Theory of Teaching, the examination shall be conducted by means of papers.

3. A candidate shall apply to the Registrar in such form as the Syndicate may prescribe. His application and fee shall be despatched through the prescribed channel so as to reach the Registrar at least four weeks before the commencement of the examination.

4. Every candidate shall be required to undergo a practical course of physical training, and shall further, in the presence of at least two examiners appointed by the Board of Examiners, give satisfactory evidence of ability to manage a class. He shall give two lessons in subjects embraced in the curriculum of high schools, one of which, at least, in the case of graduates in Arts, shall be on the English language, and, in the case of graduates in Science, in Mathematics, Nature Study, or Physics and Chemistry. The candidates shall receive due notice of the subjects in which they will be asked to give a lesson.

The examination in the Practice of Teaching shall be conducted at the Training College, and the Examiner shall also take into consideration the record that

has been kept at the College of work done during the course of training.

5. Candidates who fail in the examination in the Theory of Teaching may present themselves for re-examination therein at a subsequent examination, without attending a further course at the Training College, provided that they produce satisfactory evidence that, in the interim, they have been teaching in a recognised institution.

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## **TRANSITORY REGULATIONS PASSED BY THE SENATE AND APPROVED BY THE VISITOR.**

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I. \* Notwithstanding anything to the contrary contained in these Regulations, the subjects of examination, the courses of study, the text-books prescribed, the tests and the standards prescribed for passing or taking a place in the various divisions or classes in the Intermediate Examination and in the Examinations for the degrees of Bachelor of Arts, Bachelor of Science, Master of Arts and Master of Science (Previous and Final) of this University for the examinations of 1918 and 1919, and, in the case of candidates who fail in the examinations of 1919, for their re-examination in 1920, shall be the same as at present laid down or prescribed by the University of Allahabad for the corresponding examinations of that University, for subjects for which classes were in existence on the 1st day of October, 1917, in the Central Hindu College at Benares. This Regulation shall remain in force up to the date of the declaration of the results of the examinations of 1919 and 1920, and, till then, the attendance of the present students of the Central Hindu College, which would have counted for the examinations of the Allahabad University, shall be reckoned to be attendance at lectures in this University, for purposes of every examination of this University : Provided that

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\* Passed by the Senate on the 27th of October, 1917 and approved by the Visitor, *vide* his D. O. No. 3(c), dated the 9th January, 1918.



the examinations of M. Sc., Previous (in Physics and Chemistry) of 1918 and M. Sc. Final of 1919, as also the M. A. Previous of 1919, shall be held in the courses prescribed by this University.

II. Notwithstanding anything contained in the Regulations, a student who did not take up Samskrit for the Matriculation or Intermediate Examination may be allowed to take up, in lieu of the Samskrit Course prescribed for the Intermediate or B. A. Examination of 1920, any of the optional subjects prescribed for the said examination.

III. † Notwithstanding anything to the contrary contained in these Regulations, the subjects of examination, the course of study and the text-books prescribed for the Admission Examination of this University for 1919, and in the case of candidates who fail in the examination of 1919 for their re-examination in 1920, shall be the same as those at present laid down by the University of Allahabad for the Matriculation Examination of that University, for subjects for which classes are in existence at present (or were in July, 1918) in the Central Hindu School at Benares. This Regulation shall remain in force up to the date of the declaration of the results of the examination of 1919 and 1920, and, till then, the attendance of the present students of the Central Hindu School, which would have counted for the Matriculation Examination of the Allahabad University, shall be reckoned as attendance for

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\* Passed by the Senate on the 1st May, 1918, and approved by the Visitor, *vide* his letter No. 1131/XV—255, dated the 11th July, 1918.

† Passed by the Senate on the 17th August, 1918, and approved by the Visitor, *vide* his letter No. 1649, XV—255, dated the 11th October, 1918.

purposes of the Admission Examination of this University:

Provided that those who sit for the Admission Examination of the Hindu University in 1919 as private candidates shall be examined in the course prescribed by the Benares Hindu University.

IV. \*A. Notwithstanding anything to the contrary contained in the Regulations, and also in the Transitory Regulations (already passed):

A student who has passed the Previous Examination for the M. A. or M. Sc. Degree of the Allahabad University in any subject, may be allowed to offer himself for examination in that subject at the Final Examination of 1919 of this University, and, failing to pass therein, at the same examination of 1920, provided that he has completed, in the academical year 1918-19, a regular course of study in the subject for the Final Examination under this University.

B. Notwithstanding anything to the contrary contained in the Regulations, and also in the Transitory Regulations (already passed):

A student who, having prosecuted a regular course of study for two academical years in the Central Hindu College, appeared and failed at the Intermediate Examination of the Allahabad University, previous to the 1st October, 1917:

- (1) may be allowed to appear at the Intermediate Examination of this University in the year 1919, provided that he has completed, in the academical year 1918-19, a regular course of studies in this University in the subjects

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\* Passed by the Senate on the 11th April, 1919, and approved by the Visitor, *vide* his letter No. 730/XV—255, dated the 6th May, 1919.

- which he offered when he last appeared at the Intermediate Examination, and,
- (2) if he fails to pass therein, may be allowed to appear at the Intermediate Examination of this University in the year 1920, provided that he has completed in the academical year 1919-20, a regular course of studies in this University in the subjects which he offered when he last appeared at the Intermediate Examination.

V. \* Notwithstanding anything to the contrary contained in these Regulations, an undergraduate, who has failed more than once in the Intermediate Examination in the Faculty of Arts or in the B. A. Examination, may be admitted in 1920 to the Supplementary Intermediate or B. A. Examination, as the case may be, without attending a regular course of study in the University or a constituent College thereof.

VI. † Notwithstanding anything to the contrary contained in these Regulations, an undergraduate, who has failed more than once in, or has been sent up twice for, the Intermediate Examination in the Faculty of Arts or the B. A. Examination, may be admitted in 1920 to the Supplementary Intermediate or B. A. Examination, as the case may be, without attending a regular course of study in the University or a constituent College thereof.

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\* Passed by the Senate on the 27th July, 1919, and approved by the Visitor, *vide* his letter No. 2039-XV, dated the 8th November, 1919.

† Passed by the Senate on the 20th December, 1919, and approved by the Visitor, *vide* his letter No. 729-XV, dated the 22nd March, 1920. The Transitory Regulation given here is an amended form of the Transitory Regulation No. 5 (passed on the 27th July, 1919).

## **RULES MADE BY THE SYNDICATE.**

### **I. Recognition of examinations as equivalent to the Admission Examination of the Benares Hindu University.**

The following examinations have been recognised as equivalent to the Admission Examination of the Benares Hindu University :--

(1) The Matriculation Examination of every Indian University established by an Act of the Legislature.

(2) The School Leaving Certificate Examination of the United Provinces.

(3) The School Leaving Examination of Ajmere-Merwara.

(4) The Senior Oxford Local Examination.

(5) The Senior Cambridge Local Examination.

(6) The Final Examination prescribed for European Schools.

(7) The Diploma Examination of a Chiefs' College.

(8) The School Leaving Certificate Examination of the Madras Presidency which may be declared to be admissible to the University of Madras by that University.

(9) The School Final Examination of the North-West Frontier Province, provided the candidate has passed (that is to say, his papers have been classified under Article 151 of the Educational Code of that Province as A. Excellent, or B. Satisfactory) in one year in any complete group of subjects recognised for the Admission Examination of the Benares Hindu University.

### **II. Constitution, powers and duties of the Boards of Examiners.**

(i) The nomination of examiners for all examinations conducted by the University, shall be entrusted to Boards of Examiners.

(ii) Each Board shall consist of three members of the Senate, or members of the Faculties, elected by the Syndicate at its annual meeting. Each member elected shall hold office for two years, from the date of election or until he ceases to be a member of the Senate or a member of a Faculty, as the case may be, whichever event first happened, and shall in the former event be eligible for re-election.

(iii) In the event of a vacancy occurring after the annual meeting, for which provision has not been made, the Syndicate shall appoint a member to hold office on the Board until the annual meeting next following.

(iv) The Syndicate shall appoint one of the members to be a *Convener*. The Convener shall summon meetings and shall conduct the correspondence of the Board.

(v) The Conveners of Boards shall summon meetings of their respective Boards for the purpose of nominating examiners to hold examinations of candidates proceeding to the various examinations conducted by the University.

(vi) The names of the persons nominated by the Board shall be reported to the Syndicate for approval. If the Syndicate decline to approve the appointment of any person nominated, it shall forthwith appoint some one to act in the stead of such persons.

(vii) In the event of an Examiner declining to act or resigning his post, or being from any cause unable to fulfil his duties, the Convener of the Board concerned shall nominate a substitute. The nomination shall be reported to the Syndicate for confirmation at its next meeting.

(viii) The Examiners appointed for each particular examination in any subject or group of subjects, shall, when their number is not less than three, moderate the papers set for that examination in that subject or group of subjects. In other cases, the moderating will be done in such manner as the Vice-Chancellor may direct.

## III. Remuneration to Examiners.

*Table showing the Scale of Remuneration to be allowed to Examiners for the Examinations of the Faculties of Arts, Science, Oriental Learning and Theology.*

Name of Examination.	FOR SETTING EACH QUESTION PAPER.	FOR EXAMINING ANSWER-BOOKS.		FOR THE PRACTICAL EXAMINATION (IF ANY).		FOR THE VIVA VOCE EXAMINATION (IF ANY).		REMARKS
		Per candidate	Minimum fee payable (if any)	Per candidate	Minimum fee payable (if any)	Per candidate.	Minimum fee payable (if any)	
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
1. Admission ...	25 0 0	0 8 0	...	0 8 0	...	...	...	
2. Previous Examination in Sanskrit ...	25 0 0	0 8 0	...	...	...	...	...	
3. Intermediate ...	30 0 0	1 0 0	...	1 0 0	50 0 0	0 8 0	50 0 0	
4. B. A. Previous ...	50 0 0	1 8 0	...	...	...	1 0 0	50 0 0	
5. M. A. Previous ...	75 0 0	2 8 0	25 0 0	...	...	2 0 0	50 0 0	
6. M. A. Final ...	75 0 0	2 8 0	25 0 0	...	...	2 0 0	50 0 0	
7. B. Sc. ...	50 0 0	1 8 0	...	2 0 0	50 0 0	...	...	
8. M. Sc. Previous ...	75 0 0	2 8 0	25 0 0	...	100 0 0	...	...	
9. M. Sc. Final ...	75 0 0	2 8 0	25 0 0	...	100 0 0	...	...	
10. Intermediate (Engineering) ...	30 0 0	1 0 0	...	...	...	...	...	
11. Do. Part II ...	30 0 0	1 0 0	...	...	...	...	...	

12	B. Sc. (Engineering) Part I	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
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\* *Vide* Syndicate Resolutions No. 3 (c), dated 28th November 1917, No. 11 (b), dated 29th September 1918, No. 5, dated 19th January 1919, No. 8, dated 11th October 1919, and No. 4, dated 29th October 1919.

N. B.—1 Remuneration for conducting practical or *Viva Voce* examination shall be paid to external examiners only.

2. Examiners appointed only to translate English passages into vernacular, will be paid a fee of Rs. 15/- for such translation.

3. If any examiner in the M.A. or M.Sc. (whether Previous or Final), after setting his paper and the approval of the paper by the Board of Moderators, is prevented from marking the answer-books, then the total fee for setting and marking shall be divided equally between him and the person appointed to examine the answer-books in his place.

4. A deduction of Rs. 5/- per day will be made from the honorarium of each examiner for every day's delay in sending marks after the days fixed therefor, unless the Syndicate, for special reasons, condones the delay in any particular case (*vide* Resolution No. 4 of the adjourned meeting of the Syndicate held on the 26th September 1918.)

5. Travelling and halting allowances will be paid to the examiners on the same scale as is paid to the members of the various University bodies, such as Court, Council, etc. (*vide* Resolution No. 14 of the Council, dated the 3rd March 1918). Copies of rules and forms to be filled in, can be obtained from the Registrar.



# **IV. Fees for admission to the University Examinations.**

The following fees have been prescribed for the various examinations of the University :—

		Rs.	a.	p.
1.	Admission ...	10	0	0
2.	Intermediate ...	20	0	0
3.	B. A. ...	30	0	0
4.	B. Sc. ...	30	0	0
5.	M. A. Previous ...	20	0	0
6.	M. A. Final ...	30	0	0
7.	M.Sc. Previous ...	20	0	0
8.	M.Sc. Final ...	30	0	0
9.	*Doctor of Letters ...	100	0	0
10.	*Doctor of Science ...	100	0	0
11.	LL.B. Previous ...	20	0	0
12.	LL.B. Final ...	40	0	0
13.	Master of Laws ...	100	0	0
14.	Doctor of Laws ...	200	0	0
15.	L. T. ...	20	0	0
16.	Intermediate (Engineering)			
	Part I ...	10	0	0
17.	„ Part II ...	10	0	0
18.	B. Sc. (Engineering) Part I ...	15	0	0
19.	B. Sc. (Engineering) Part II ...	15	0	0
20.	Previous Examination in			
	Sanskrit ...	...		...
21.	Praveshika ...	...		...
22.	Madhyama ...	...		...
23.	Shastri ...	...		...
24.	Smritiratna ...	...		...
25.	Shastracharya ...	...		...
26.	Dharmacharya ...	...		...

\* A candidate who has been found qualified for the degree of Doctor of Letters or Doctor of Science, shall pay to the University, through the Registrar, the sum of Rs. 100 for the diploma of the said degree.

## V. Tuition Fees and Hostel Fees.

### A. Tuition Fees.

#### ARTS AND SCIENCE COLLEGE.

1. M. A. & M. SC. CLASSES.—Admission fee Rs. 6/-: Tuition fee—Rs. 7/8 per mensem, for ten months only.
2. B. A. & B. SC. CLASSES.—Admission fee Rs. 5/-: Tuition fee—Rs. 6 per mensem, for ten months only.
3. INTERMEDIATE CLASSES.—Admission fee Rs. 4/-: Tuition fee—Rs. 5 per mensem, for ten months only.
4. LABORATORY FEES.—M. Sc. Classes Rs. 3/- p. m. : B. Sc. Classes—Rs. 2/- p.m : Intermediate classes Re. 1/-: Intermediate Biology classes—/8/- p. m. *extra*.
5. GAMES FEE.—Rs. 3 p. a. for all the classes ; payable in two instalments of Re. 1/8 each, in July and January.
6. COMMON ROOM FEE.—Annas 8 per annum ; payable in two instalments of annas 4 each, in July and January.
7. ENROLMENT FEE.—Besides the above rates of fees, which are payable to the College, every student has, on his admission, to pay to the University, through the College, an Enrolment Fee of Rs. 2/-, unless he has already been duly enrolled as a student of the University.

#### B. Sc. IN ENGINEERING.

Admission fee	Rs. 5	Payable on first admission. The balance of caution-money (after paying College dues) will be returned, if applied for within a year of leaving the College.
Caution-money deposit	„ 10	

TUITION FEES payable in eight equal monthly instalments from July to April.

First two years, each year Rs. 80, in eight instalments of Rs. 10, including Laboratory charges.

Second two years, each year Rs. 120, in eight instalments of Rs. 15, including Laboratory charges.

COST OF TEXT-BOOKS AND INSTRUMENTS required for the First Year will be about Rs. 120. Students are strongly advised to consult the Professor in charge, before purchasing.

### COLLEGES OF ORIENTAL LEARNING AND THEOLOGY.

No fees are charged.

### TEACHERS' TRAINING COLLEGE.

No tuition fees are charged.

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### *B. Hostel Fees.*

A fee of Rs. 3 per month is charged for every single-seated room, and that of Rs. 2/- for other seats.

### VI. Re-totalling of Marks.

1. On payment of a fee of Rs. 10, a candidate for any examination may be allowed to have his marks re-totalled in the subject or subjects in which he fails, provided he applies within one month after the publication of the results.

2. This fee is to be refunded to the candidate, in case any mistake is found in the original totalling of marks. (*vide* Resolution No. 3 of the meeting of the Syndicate held on the 31st August, 1920).

### VII. Obtaining Marks from the Registrar.

A candidate shall be permitted to have, from the Registrar's office, a copy of the marks obtained by him in the different subjects of his examination, on payment of Rs. 2 after the publication of the results (*vide* Resolution No. 14 of the meeting of the Syndicate held on the 2nd February, 1920).

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### VIII. Appointment of Wardens and Assistant Wardens.

(1) There should be a Warden (who shall be appointed by the Syndicate) in charge of every group of

hostels, accommodating not more than 300 students, (2) the Warden so appointed should be of the status of a Senior Professor of the University and shall be appointed for a period of three years, and (3) the Warden should be entitled to have a residence free of rent.

Each hostel, accommodating not more than 60 students, should be in charge of an Assistant Warden, who should reside in the quarters attached to the Hostel and should be a member of the teaching staff of the University. The Assistant Warden will be entitled to have quarters free of rent.

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### **IX. Rules for the Election of Two Representatives of the students to the Students' Residence Committee.**

(1) Nominations, supported by at least 20 signatures, must reach the Registrar within 10 days after the issue of the call.

(2) On receipt of nomination, the Registrar shall, without delay, publish the names and fix the date of election which shall be the 7th day after the publication of the nomination.

(3) Each Principal shall take the votes of his own students and report the number of votes for each nominee to the Registrar, within 24 hours of the voting.

(4) The Registrar shall declare the results on the total of the votes, within three days of the receipt of the reports from the Principals.

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### **X. Rules for the Internal Management of the Hostels of the Benares Hindu University.**

1. None but students of the University or its constituent Colleges or persons engaged in research work thereon, will be admitted to the Hostels, except with the special sanction of the Pro-Vice-Chancellor.

2. Applications for admission to the Hostels should be made, in a prescribed form (obtainable at the Principals' offices), to the Principals of the Colleges who will forward them to the Wardens for disposal.

3. After the admission of boarders to a Hostel, the allocation of seats will rest entirely with the Assistant Warden of that block.

4. Each boarder, on his admission or re-admission, shall deposit Rs. 5/ as "Caution Money," which will be refunded to him after necessary deductions, if any, when he leaves the Hostel.

5. Boarders shall be liable to pay rent at such rates as may be fixed by the Council on the recommendation of the "Students' Residence Committee."

6. All Hostel dues shall be payable along with the College fee.

7. Boarders may make their own arrangements (subject to the approval of the Assistant Warden) for messing in quarters provided for the purpose; but arrangements for common messing shall be made by the Assistant Warden, when he is requested.

8. Private servants in a Hostel must be approved by, and be subject to, the authority and discipline of the Warden and Assistant Warden.

9. Each mess, when managed by students, shall, as a rule, consist of not less than ten boarders for which a kitchen and a store-room will be provided free of charge.

10. Separate kitchens for smaller numbers of students may, in special cases, be provided, on payment of a rent of Rs. 2/ per month.

11. Non-vegetarian diet will not be allowed in any kitchen, except in such as are reserved exclusively for non-vegetarians.

12. The non-vegetarian kitchen shall be *sufficiently* removed from the vegetarian kitchen.

13. No boarder shall lodge any outsider (including his guardians and friends) in his room, without the permission of the Assistant Warden.

14. The Assistant Warden may, for good and sufficient cause, exclude any outsider from the Hostel.

15. The roll will be called once daily at 8 P.M. in winter, and 9 P.M. in summer. Boarders absent at the time of the roll-call, without the permission of the Assistant Warden, will be treated as absent and liable to disciplinary action, which may amount to expulsion.

16. No boarder shall leave Benares during term time, except with the written permission of the Assistant Warden.

17. The gates of the Hostel will be closed at 9 P.M., when outsiders, if any, who have not obtained the permission of the Assistant Warden to stay, will have to leave the premises.

18. Boarders wishing to be absent from the Hostel after 9 P.M. must get the written permission of the Assistant Warden beforehand.

19. Any boarder, found guilty of gross misconduct, will be removed from the Hostel by the Warden, with the approval of the Pro-Vice-Chancellor.

20. For act of misconduct of a less serious kind, a boarder may be fined by the Warden up to a limit of Rs. 5/-, or the misconduct may be noted against him in the Conduct Book. If, in the opinion of the Warden, the number of such acts and their seriousness merit the punishment of expulsion, wholly or for a period, from the Hostel, he shall submit the case to the Pro-Vice-Chancellor.

21. No music will be allowed in the Hostel outside the hours prescribed therefor, except with the permission of the Assistant Warden.

22. Boarders shall not hold any meetings in the Hostel, other than those of the recognised Hostel Societies, without the permission of the Assistant Warden.

23. Boarders will be ordinarily attended by the Medical Officer of the Hostel, free of charge.

24. An outside medical practitioner may be called in by a boarder with the knowledge of the Hostel Medical Officer and the Assistant Warden; and, in such cases, the fees of the doctor consulted must be paid by the boarder.

25. Boarders suffering from any infectious disease, shall be segregated in quarters provided for the purpose.

26. The Assistant Warden, on the recommendation of the Medical Officer, can, and with the approval of the Pro-Vice-Chancellor shall, exclude a boarder suffering from any disease which renders the sufferer unfit to reside in the Hostel.

27. Every boarder shall, on admission, be examined by the Medical Officer and thereafter periodically at least once a year, and a full record of the examination shall be kept in the form prescribed by the "Students' Residence Committee."

28. All matters, not provided for in the above rules, shall be decided by the Pro-Vice-Chancellor.

29. No punitive action shall be taken against any boarder, without giving him an opportunity for explanation.

30. The above rules may, in their application to the existing Hostels, be modified or suspended by the "Students' Residence Committee," in such manner as they think fit.

## XI. The Academic Costumes.

*For the Chancellor*:—A purple teray velvet gown, made like an Oxford Proctor's dress gown, with *four-inch* gold lace down the fronts and round the bottom of the sleeves outside. If a cap is worn, it should be a black velvet academic cap; bound round with gold lace and gold tassel, ten inches long.

*For the Pro-Chancellor*:—A purple teray velvet gown, made like an Oxford Proctor's dress gown, with *two-inch* gold lace down the fronts and round the bottom of the sleeves outside. If a cap is worn, it should be a black velvet academic cap, bound round with gold lace, and gold tassel, seven and a half inches long.

*For the Vice-Chancellor*:—A purple teray velvet gown, made like an Oxford Proctor's dress gown, with *four-inch* silver lace down the fronts and round the bottom of the sleeves outside. If a cap is worn, it should be a black velvet academic cap, bound round with silver lace, and silver tassel, *ten inches* long.

*For the Pro-Vice-Chancellor*:—A purple teray velvet gown, made like an Oxford Proctor's dress gown, with *two-inch* silver lace down the fronts and round the bottom of the sleeves outside. If a cap is worn, it should be a black velvet academic cap, bound round with silver lace, and silver tassel, *seven and a half inches* long.

*For the Registrar and Members of the Senate and Syndicate*:—A midpurple No. 281 silk or stuff gown, of Oxford University Master of Arts pattern, and a scrap of old gold No. K 10 silk, four inches wide, with a fringe of the same colour three inches deep. (Members of the Senate or Syndicate, who are graduates of any other University, may wear the



gown and hood prescribed by their University for the degrees they may hold). For their head dress, they shall wear a turban of Kapoori light cream colour, or, if preferred, a black square cap, with black silk tassel.

*For the degree of Bachelor of Arts:—*A midpurple No. 281 stuff gown, cut like the Oxford University Bachelor of Arts gown, and a hood made of silk of the same colour, edged with a band of old gold K 10 cardinal colour silk, of one inch width on both sides, lined with old gold K 10.

*For the degree of Master of Arts:—*A midpurple No. 281 stuff gown, cut like the Oxford University Master of Arts gown, and a hood made of silk of the same colour. The colour of the band on the edge of the hood shall also be old gold K 10, lined throughout with old gold K 10.

*For the degree of Bachelor of Science:—*A midpurple No. 281 stuff gown, cut like the Oxford University Bachelor of Arts gown, and a hood made of silk of the same colour, edged with a band of light 265 blue silk, of one inch in width on both sides. The lining of the hood shall be blue 265.

*For the degree of Master of Science:—*A midpurple No. 281 stuff gown, cut like the Oxford University Master of Arts gown, and a hood made of silk of the same colour, lined and edged throughout with light blue 265.

*For the degree of Licentiate of Teaching:—*The B. A. gown, with a hood like that for the M. A. degree lined throughout with cardinal silk.

**HEAD DRESS FOR ALL GRADUATES:—**All graduates shall wear a turban of Kapoori light cream colour, or, if preferred, a black cloth square cap, with black silk tassel.

## **XII. Rules for and Procedure to be adopted at the Convocation for conferring Degrees.**

1. A Convocation for the purpose of conferring Degrees shall be held annually, in the month of October or November, or at such other time as the Chancellor shall direct.

2. Candidates for degrees must, ten clear days before the day fixed for the Convocation, inform the Registrar, in writing, of their intention to be present. No person shall be admitted to the Convocation who has not thus sent in his name to the Registrar.

3. Any person, who, having sent in his name to the Registrar as a candidate for a degree at a Convocation, fails to appear, shall, when he next appears for his degree, be charged a fee of rupees ten, unless he can furnish to the Syndicate a sufficient reason for his non-appearance.

4. A candidate for a degree, who is not resident within the Benares district at the time, or who from some unavoidable cause is unable to be present in person, may, with the permission of the Syndicate and on payment of a fee of rupees ten, be admitted *in absentia* to that degree at the Annual Convocation.

5. A woman candidate for a degree, who is precluded by custom from appearing in public, may be admitted *in absentia* to her degree and without any fee, provided that she informs the Registrar, in writing, ten clear days before the day fixed for the Convocation, of her desire to be so admitted to the degree.

6. The Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Pro-Vice-Chancellor and Members of the Senate, shall assemble in the Senate Room at the appointed hour.

7. The Graces of the Senate, on behalf of the candidates for admission to the several degrees, will be supplicated in the following order :

*Arts*:—By the Dean of the Faculty of Arts.

*Science*:—By the Dean of the Faculty of Science.

*Faculty of Oriental Learning*:—By the Dean of the Faculty of Oriental Learning.

*Faculty of Theology*:—By the Dean of the Faculty of Theology.

8. The formula to be used for each Grace shall, *mutatis mutandis*, be as follows :

“I move that a Grace of the Senate be passed that those persons whom the examiners have certified to be qualified for the degree of.....be admitted to that degree.”

9. Whereupon the Chancellor or the Vice-Chancellor shall put the question :—

“Doth it please you that this Grace be passed ?” and, the Senate assenting, the Chancellor or the Vice-Chancellor shall say—

“This Grace is passed.”

10. When all the Graces have been passed, the Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Pro-Vice-Chancellor and Members of the Senate shall walk in procession to the Hall in which the degrees are to be conferred.

11. Candidates shall be presented in the gowns and hoods pertaining to their respective degrees.

12. On the procession entering the Hall, candidates present shall rise and remain standing until the Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Pro-Vice-Chancellor and Members of the Senate have taken their seats.

13. The Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Pro-Vice-Chancellor and Members of the Senate having taken their places, the Chancellor or the Vice-Chancellor shall say :—

“ This Convocation of the Senate of the Benares Hindu University has been called to confer degrees upon the candidates, who, in the examinations recently held for the purpose, have been certified to be worthy of the same. Let the candidates stand forward.”

14. Then the candidates standing, the Chancellor or the Vice-Chancellor shall put to them, the following questions :

१. अनुयोगः—“अपिस्विदपास्त्रीकममिलपन्तः सङ्गिरन्ते भवन्तः यत्तद्भङ्गिरीप्सितानां तत्तद्भौवज्ञानिकव्यपदेशानां यथायथमभिनन्दितामाहन्तीमुपारूढैः, साधुजननेदीयसी पदवी विश्वविद्यालयस्यास्य समुचिता, पूतेन मनसा सुनृतेन वचसा समवदातेन कर्मणा च, नितान्तं निषेव्येत ॥”

Q.—“ Do you sincerely promise and declare that, if admitted to the degrees, for which you are severally candidates and for which you have been recommended, you will in thought, word and deed conduct yourselves as becomes members of this University ? ”

प्रतिवचनम्—प्रतिजाने ।

A.—“ I do promise. ”

२. अनुयोगः—अपिनाम सङ्गिरन्ते भवन्तः—यदेतद्धर्मविज्ञानपथयोः योगक्षेमधुरा यावद्वकाशं यावच्छक्ति च, निरूह्येत भवद्भिः ॥

Q.—“ Do you promise that, to the utmost of your opportunity and ability, you will support and promote the cause of morality and sound learning ? ”

प्रतिवचनम्—प्रतिजाने

A.—“ I do promise. ”

३. अनुयोगः—अपिनाम सङ्गिरन्ते भवन्तः—यदिह विश्वजनीनव्यवस्थासमवस्थयोः परिपालने संमुपलालने च यथाशक्ति व्याप्रियेत भवद्भिः ॥

Q.—“Do you promise that you will, as far as in you lies, uphold and advance social order and the well-being of your fellow-men?”

प्रतिवचनम्—प्रतिज्ञाने

A.—“I do promise.”

15. The Chancellor or the Vice-Chancellor shall say :—

“Let the candidates be now presented.”

16. Then the candidates shall be presented to the Chancellor (or the Vice-Chancellor) by the Heads of the respective departments of the University, being members of the Senate, or by other members of the Senate, and the following formula shall be used for the purpose :—

“Sir, I present unto you....., who has been examined and found qualified for the degree of....., to which I pray he may be admitted.”

17. The candidates shall receive their diplomas from the Chancellor (or the Vice-Chancellor).

18. When the candidates for the same degree have been presented, the Chancellor or the Vice-Chancellor shall say to the candidates, who shall remain standing : (The names of the candidates to be inserted at the beginning of the formula).

“.....by virtue of the authority vested in me as Chancellor (or Vice-Chancellor) of the Benares Hindu University, I admit you to the degree of.....of this University, and, in token thereof, I present this diploma to you and authorise you to wear the hood ordained as the insignia of your degree.”

19. The Registrar shall then read out the names of the candidates to be admitted to the different degrees *in absentia*, and shall say :—

"I pray that the following be admitted to..... degree *in absentia*," upon which the Chancellor (or the Vice-Chancellor) shall say :—

"I admit.....to the.....degree."

20. When all the candidates have been admitted to the different degrees, the Registrar shall lay the record of the degrees that have been conferred before the Chancellor (or the Vice-Chancellor) who shall sign the same.

21. An exhortation to the graduates will then be recited in Samskrit.

22. Then an address shall be made to the candidates by the Chancellor or the Vice-Chancellor, exhorting them to conduct themselves suitably unto the position to which by the degrees conferred upon them they have attained.

23. At the close of the address, the Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Pro-Vice-Chancellor and the Members of the Senate shall rise and the Chancellor (or the Vice-Chancellor) shall say :—

"I dissolve this Convocation."

24. Then the Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Pro-Vice-Chancellor and Members of the Senate shall retire in procession to the Senate Room, the graduates standing.

## RULES MADE BY THE COUNCIL.

### I. Rules regarding the payment of Travelling and Halting Allowances to the Members of University Bodies and the Examiners.\*

1. Members of the Court, the Council, the Senate, the Faculties, the Syndicate, the Boards of

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\* *Vide* Resolutions of the Council, No. 3, dated the 15th of July, 1917, No. 14, dated the 3rd of March, 1918, and No. 8, dated the 30th of July, 1918 (Minutes, Vol II, pp. 1 and 384 and Vol III A, p. 48.)

Studies and the Board of Appointments, shall be entitled to draw the actual sum spent by them in travelling from their respective places of residence to Benares and back, and during their stay at Benares, for the business of the University, provided that the sum so spent shall not exceed *one first class railway fare* each way, by the shortest route, and *rupees five a day* on account of halting allowance for each day of work at Benares.

2. The amount drawn as halting allowance may consist of garry or palki hire from their place of residence to the University meetings and back. It may also include charges incurred for travelling payable on account of any servant brought by them and all other expenses incurred in the journey, so long as it does not go above the maximum amount allowable under Rule 1.

3. Where there is no railway communication between the place of residence of any member, or such railway communication is available for only a part of the journey, the member shall be entitled to draw reasonable expenses for the journey by road, subject to a *maximum of annas eight per mile* for the journey by road.

4. In special cases, the Council may allow such extra expenditure as it may deem fit.

5. In cases of doubt or difference of opinion, the Registrar or Officer in charge of the Registrar's duties, shall refer the matter to the Vice-Chancellor, or the Pro-Vice-Chancellor and, subject to the final control of the Council, the orders of the Vice-Chancellor or the Pro-Vice-Chancellor shall be final.

6. Local members, who have no conveyance of their own, shall be entitled to draw reasonable charges for conveyance to the place of the meeting and back.

7. These Rules shall apply with effect from 1st November, 1916, and shall be applicable to all meetings held after the said date.

*N.B.*—The Travelling and Halting Allowances shall be paid to Examiners on the same scale as is paid to the members of the Court, the Council, etc.

## II. Travelling and Halting Allowance Rules for officers serving under the University.\*

**For officers in class I, i.e., those getting Rs. 500 p. m. and upwards.**

Travelling Allow- Single First Class by Rail or  
ance. Steamer.

8 annas per mile by road.

Single Third Class by Rail or  
Steamer (for one servant).

One anna per mile by road (for  
one servant).

Halting Allowance Rs. 3 per day.

4 annas per day (for one servant).

**For officers in class II, i.e., those getting Rs. 150 or more, but less than Rs. 500 p.m.**

Travelling Allow- Single Second Class by Rail or  
ance. Steamer.

4 annas per mile by road.

Single Third Class by Rail or  
Steamer (for one servant).

One anna per mile by road (for  
one servant).

Halting Allowance Rs. 2 per day.

4 annas per day (for one servant).

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\* Passed by the Council at its meeting held on the 27th January, 1918.



**For officers in class III, i.e., those getting Rs. 25 or more, but less than Rs. 150 p. m.**

Travelling Allow- Single Inter Class by Rail or  
ance. Steamer.

Two annas per mile by road.

Single Third Class by Rail or  
Steamer (for one servant).

One anna per mile by road (for  
one servant).

Halting Allowance Re. 1 per day.

Four annas per day (for one ser-  
vant).

**For officers in class IV, i.e., those getting  
less than Rs. 25.**

Travelling Allow- Single Third Class by Rail or  
ance. Steamer.

One anna per mile by road.

Halting Allowance Four annas per day.

Note.—1. These Travelling and Halting Allow-  
ances will be paid only when officers are deputed on  
duty.

2. Travelling allowance is not ordinarily  
allowed to any person for a journey to join his first  
appointment.

3. Officers sent out to realise subscrip-  
tions and donations will be paid actual conveyance  
charges incurred by them in collection work, in  
addition to the ordinary Travelling and Halting  
Allowances to which they may be entitled.

### **III. Rules regarding the relations between the Principals and the University Professors of the Benares Hindu University\*.**

1. Applications for casual leave by the staff, in-  
cluding the University Professors, will be disposed of

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\* Passed by the Council at its meeting held on the 10th  
August, 1918.

by the Principal of the Institution to which they are attached.

2. Applications for leave, other than casual, by any member of the staff must be sent, through the Principal of the Institution, to the Vice-Chancellor, or, in his absence, the Pro-Vice-Chancellor, for disposal according to the Statutes and Regulations.

3. All communications to the Vice-Chancellor by the University Professors or other members of the teaching staff in their capacity as such, shall be sent through the Principal to the Vice-Chancellor.

4. The head of any department in a College, whether a University Professor or otherwise, will have the right, subject to the Statutes and Regulations, to regulate the courses of study and the classes and lectures to be held by the teachers in his department, will have the control of his department and its laboratories, libraries and museums, but will be subject to the control of the Principal in all matters affecting the time-table and the discipline of the students.

5. The head of every department in the College shall be responsible for presenting to the Principal, by a certain convenient date fixed by the latter, a statement showing the arrangements proposed by him for the allocation of hours, rules, classes and lectures among the various subjects and teachers in his department.

6. The Principal shall be responsible for co-ordinating the proposals of the different heads of departments, and a copy of his co-ordination scheme shall be sent to each of the heads, within a time sufficiently long, before the commencement of the course for the session, to admit of re-consideration. The heads of the different departments may make suggestions for the improvement of the scheme, and the Principal will endeavour to meet these impartially and to the best of his ability.

7. If the head of any department is dissatisfied with the Principal's final decision, he may make a concise statement of his case, through the Principal, to the Vice-Chancellor. The Principal shall forward such statements with his remarks to the Vice-Chancellor.

8. Except where the Vice-Chancellor refers a question to the Council or Syndicate, his decision shall be final and carried out by all concerned.

9. A Professor actually engaged in research work, and who on that account wants special consideration to be shown to him by way of some relief from the burden of teaching work, should make a representation on the subject to the Vice-Chancellor, through the Principal, giving particulars of the research on which he is engaged.

10. Where a Professor has to leave Benares to attend a meeting of examiners of any other University or the meeting of any academic body or any educational, literary or scientific conference, his absence should not be treated as on casual leave, but as absence on deputation, provided, however, that the permission of the Vice-Chancellor is previously obtained in all such cases. In granting permission, the Vice-Chancellor will have regard to the probable total period of such absence in the year on the part of the Professor concerned, and may grant or refuse permission as he thinks fit. Applications for permission in this behalf should be forwarded through the Principal.

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#### **IV. Leave Rules for the Employees of the Benares Hindu University.**

All employees of the Benares Hindu University will be eligible for the following different kinds of leave, the sanctioning authority in all cases, except that of Casual Leave, being the Council :

1. Casual Leave.
2. Privilege Leave.
3. Medical leave.
4. Extraordinary Leave.
5. Study Leave.

1. *Casual Leave*:—Casual Leave on full pay may be granted up to the maximum limit of ten days in the academical year (1st July to 30th June). The granting of such leave rests with the Head of the Institution or Office, who shall keep a register showing the date or dates, on which such leave has been taken by the different members of the staff. In the case of the Head of an Institution or Office, the sanctioning authority shall be the Vice-Chancellor, or, in his absence from Benares, the Pro-Vice-Chancellor, and such leave shall be entered by the authority granting it in a Register kept for the purpose.

In cases where it is not practicable to obtain the previous sanction of the Vice-Chancellor or Pro-Vice-Chancellor, the Head of an Institution or Office may go on leave in anticipation of sanction, putting some senior officer in charge, and report the matter to the Vice-Chancellor or the Pro-Vice-Chancellor.

Except under special circumstances and with the previous permission of the sanctioning authority, casual leave shall not be combined with any other kind of leave, and it shall not be taken in continuation of Dusserah, Winter or Summer Vacation.

2. *Privilege Leave*:—The amount of Privilege Leave earned by a member of the staff will be one-eleventh part of the time during which he has been in active service, provided that no privilege leave can be earned when three months' such leave is due to him. The calculation must be made as follows: One calendar month for every eleven calendar months of duty, and one day for every eleven days of the balance. The amount of privilege leave admissible at one time shall be limited to three calendar months.

Privilege Leave will be on half pay to those who are allowed the Summer Vacation in the year, and on full pay to others.

N. B.—Privilege Leave shall not be granted at intervals shorter than six months, nor shall it be granted to those who are on probation.

3. *Medical Leave* :—Medical Leave on half pay will be given in cases of illness, provided the application for such leave is supported by a Certificate from a Medical Practitioner of standing, including Vaidyas and Hakims. The period for which such Medical Leave may be granted, may extend to one month after one year's service, and to an additional month for every additional year's service, subject to a maximum limit of six months.

4. *Extraordinary Leave* :—Extraordinary Leave may be granted in special cases, but the person availing himself of this leave will get no allowance of any kind.

5. *Study Leave* :—No rules framed as yet.

*Note A* :—It must be distinctly understood that no leave can be claimed as a matter of right, and that the sanctioning authority is the sole judge of the necessity for the leave.

*Note B* :—Leave should always be applied for before it is taken, except in cases where good reason can be adduced for such application not having been made ; otherwise, the Council may, at its option, regard the unauthorised absence as amounting to a break of service.

*Note C* :—No University employee, while on leave of any kind, shall take up employment elsewhere, except with the previous sanction of the Council.

## **V. Rules of the Provident Fund of the Benares Hindu University.**

1. Every employee of the Benares Hindu University holding a substantive office and receiving a salary of Rs. 15 p. m. or more, shall be required to subscribe, at the rate of  $6\frac{1}{2}$  per. cent. on his salary, to a Provident Fund, for which an account shall be opened at the Post Office Savings Bank, in the name of the Benares Hindu University; investments being made in G. P. Notes or in such other securities as the University may, from time to time, determine subsequently, if a sufficient amount accumulates and such investment appears advisable. The deduction shall be made upon every salary bill presented, and shall be credited at once to the Fund. In making this deduction, fractions of a rupee of the salary shall be omitted.

2. The Benares Hindu University shall make a contribution to the deposits account of each depositor, equal to one-half of the amount of the deduction made from his salary under the preceding rule. Such contribution shall be credited to the Fund, month by month, in favour of such employee, together with the deduction from his salary, and the total amount shall be deposited in the Post Office Savings Bank within three days of each monthly distribution of salary, and, as far as possible, before the 4th of each month. The contribution shall be charged in the Benares Hindu University accounts, under the head of "Provident Fund."

3. The deposits and contributions, with interest thereon at the credit of any employee, may be withdrawn—

(a) On the decease of the depositor, when the amount shall be paid to the person or persons nominated by him under Rule 14, or, when no such nomination is made, to his legal heir or heirs.

(b) On his ceasing to be in the service of the Benares Hindu University, when the amount shall be paid to the employee, provided he has put in five years' service.

4. (a) If an employee is dismissed or resigns without permission, or before putting in five years' service, the Benares Hindu University may withhold the contribution allotted to him, together with the interest accrued thereon, and pay to the employee only the balance at his credit, without such contribution and the interest on that contribution.

(b) In the case of there being any outstandings against an employee when he ceases to be an employee, the Benares Hindu University shall deduct the amount of such outstandings from his deposits, and pay him the net balance after such deduction.

5. Notwithstanding anything contained in these Rules, no employee of the University will be entitled to the benefit of these Rules who is otherwise entitled to a pension, or on whose account the University contributes towards his pension and leave allowance, or who has been appointed by the University on a consolidated salary or on special terms.

6. Any contribution and interest withheld from a dismissed employee, shall lapse to the Benares Hindu University.

7. In case of urgent necessity which, in the opinion of the Council of the Benares Hindu University, justifies the course, the University may allow a depositor an advance of a sum, not exceeding three months' pay, from the sum deposited by him, with interest thereon (excluding the contribution of the Benares Hindu University and the interest thereon). The advance will be recovered in not less than twelve, or more than twenty-four, instalments. When an advance is repaid, as regards principal, in not less

than twelve instalments, a thirteenth instalment, representing interest equivalent to 3 per cent. of the amount of the advance, should be paid in the month following that in which the last instalment is paid. Similarly, an additional instalment, equivalent to 6 per cent. of the total amount of the advance, should be paid when the advance is repaid in more than twelve instalments. In calculating the  $\frac{3 \text{ per cent.}}{6 \text{ per cent.}}$  instalments as above, a fraction of a rupee should be taken at the next higher whole rupee, if it exceeds 8 annas, and should be ignored, if it does not. Recoveries will be made monthly, commencing from the first payment of a full month's salary after the advance is granted ; but no recovery will be made from an officer while he is on leave of any kind.

8. A separate account, in Form A, appended shall be kept in the Office on account of every depositor, and shall be signed by him annually ; and a copy of this account, which shall show every payment credited, with interest thereon, shall be furnished to every depositor annually, in November, and on his ceasing to be an employee.

9. Amounts credited or debited to the Provident Fund shall, on the same day, be posted to the Provident Fund Ledger, in Form B, appended, in full detail. The figures for column 8 in the Ledger must be calculated monthly, and the net balance of each account entered in columns 5 and 9 ; but the figures in these columns can be proved only once a year by the Savings Bank Pass Book. Great care should, therefore, be taken to make the monthly calculations, as far as necessary, according to the rules in force in the Post Office. The Provident Fund Ledger shall have separate pages for each month's transactions.

10. No voluntary deposits from employees will be credited to the Provident Fund.



11. Employees are not eligible to subscribe to the Provident Fund while absent on leave other than Casual or Privilege Leave.

12. On a depositor leaving his service, his account shall be closed, and unless the amount at his credit be withdrawn within a certain period, *viz.*—for a balance of Rs. 10 and under, one year; for balances over Rs. 10, three years—it shall be written off as a dead account, and repaid only under the special orders of the Council of the Benares Hindu University.

13. When accounts become “dead,” they must be removed from the Provident Fund Ledger and be credited in the Cash Book as a miscellaneous receipt, the money being drawn out of the Savings Bank. On an amount being thus written off, it should be entered in a “dead account” register, in which subsequent repayment shall be noted in order to avoid a double payment.

14. Every employee coming under these Regulations shall be required to sign a written declaration that he has read these Rules and agrees to abide by them, and, within one month of these rules coming into force or of his appointment, shall hand in for registration in the University Office the names of the person or persons to whom he wishes the balance at his credit to be paid in the event of his decease.

The depositor may from time to time add to or change his nominee or nominees by written application to the Council of the Benares Hindu University.

A register of such nominees, shall be kept in the University Offices, in Form C.

15. The above Rules shall come into force with effect from 1st July, 1918.





Form C.

Name of Depositor.	Name and address of his nominated heir or heirs.	Signature of Depositor.	Signature of the Pro-Vice-Chancellor, • B. H. U.

**FORMS.****(A) Forms of application for admission  
to examinations.***Roll No.....***(1) BENARÉS HINDU UNIVERSITY.****ADMISSION EXAMINATION.***Application.*

This application with the examination-fee must reach the University Office on or before the.....

To

THE REGISTRAR,

BENARES HINDU UNIVERSITY.

SIR,

I request permission to present myself at the ensuing Admission Examination of the Benares Hindu University.

The fee \* of Rupees 10 is forwarded herewith.

I am, &c.

Student,.....School.

N. B.--Name to be written in full and clearly.

**CERTIFICATE.**

I CERTIFY that the above-named candidate has attended a regular course of instruction at a recognised School, in each and all of the subjects offered, for not less than two years preceding the date of the Examination ; that he has not already passed the Admission Examination of the University ; that he has signed the above application in my presence ; that I believe the subjoined account to be true ; and that I

\* This application, with the examination fee, must be sent in the same cover, registered, or presented by hand. The fee must be in Cash or Government Currency Notes. Half Notes and Postage Stamps will not be received.

N. B.—The Admission Card will be sent to the Officer who signs this application form, and not direct to the candidate.

know nothing against his character which ought to debar him from admission to the Examination.

Name.....

Head Master or Principal,

.....School or College.

The.....

N. B.—The certificate of every candidate must be signed by the Principal or Headmaster of the Institution from which he appears.

### PARTICULARS TO BE FILLED IN BY THE CANDIDATE.

- 
- (1) Name (in full).....
- (2) Date of Birth.....
- (3) Age (in years and months on } ....Years...Months.  
the first day of January, 19... }
- (4) Name and occupation } Name.....  
of father. } Occupation.....
- (5) Name of guardian.....
- (6) Race.....
- (7) Religion.....
- (8) Caste.....
- (9) District and town or village where resident.....

(Signature of Candidate in full).

## SUBJECTS TAKEN UP BY THE CANDIDATE.

N. B. Strike out subjects not taken up.

Group A	or	Group B
(1) English		(1) English
(2) Mathematics		(2) Mathematics
(3) History and Geography		(3) History and Geography
(4) Samskrit		(4) A modern Indian language*
(5) Any one or two of the following subjects :—		(5) Any one or two of the following subjects :—
(a) A modern Indian language*.....		(a) Samskrit
(b) Any other Classical language*.....		(b) Any other Classical language*.....
(c) A modern European language*.....		(c) A modern European language*.....
(d) Elementary Physics and Chemistry		(d) Elementary Physics and Chemistry
(e) Botany		(e) Botany
(f) Drawing		(f) Drawing
(g) Manual Training		(g) Manual Training
(h) Agriculture and Surveying		(h) Agriculture and Surveying

*For Private Candidates only.*

Roll No.....

(2) BENARES HINDU UNIVERSITY.  
P

## ADMISSION EXAMINATION.

*Application.*

This application with the examination-fee must reach the University Office on or before the.....  
To

THE REGISTRAR,  
BENARES HINDU UNIVERSITY.

SIR,

I request permission to present myself at the ensuing Admission Examination of the Benares Hindu University.

The fee of Rupees 10 is forwarded herewith.

I am, &amp;c.,

*Private Candidate.*

N. B.—Name to be written in full and clearly.

\* Name the language here.

## CERTIFICATE.

I CERTIFY that the above-named candidate has signed this application in my presence ;† that he has not already passed the Admission Examination of the University ; that I believe the subjoined account to be true ; and that I know nothing against <sup>his</sup><sub>her</sub> character which ought to debar <sup>him</sup><sub>her</sub> from admission to the Examination.

..... Head Master of † .....

Inspector of Schools.....

The.....

N. B.—The certificate of a candidate, who appears as a *Private Candidate* (a candidate who has obtained the permission of the Syndicate, under Regulation 12, Chapter XL of the University Regulations), to appear at the examination, must be signed by a Government Inspector of Schools, or, in a Native State (a) if the Government of India have made the direction specified in Regulation 6 (a) of Chapter XL, by the educational authority of that State or (b) if no such direction has been made regarding that State, by an officer empowered by the Government of India.

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The fee must be paid in Cash or Currency Notes. Half Notes and Postage Stamps will not be received.

This application, with the examination-fee, must be sent in the same cover, registered, or presented by hand.

† In the case of a woman candidate, her presence need not be insisted upon, if the Inspector is otherwise satisfied about her identity.

‡ In cases where a candidate has at any time previously studied in an institution, this certificate must be signed by the head of that institution.

N. B.—[1] Private candidates shall not be allowed to take Science or Manual Training as one of the subjects for examination, unless they satisfy the Syndicate that they have completed a course of instruction in Science or Manual Training, as the case may be.

[2] Permission will not be granted to appear privately at the next ensuing Admission Examination to candidates who have failed to obtain promotion into class X or the equivalent class in any School.



### PARTICULARS TO BE FILLED IN BY THE CANDIDATE.

1. Name (in full).....
2. Date of Birth.....
3. Age (in years and months } .....Years....Months.  
on the 1st day of January, 19... }
4. Name and occupation } Name.....  
of father. } Occupaion.....
5. Name of guardian.....
6. Race.....
7. Religion.....
8. Caste.....
9. District and town or village where resident.....
10. Full Postal Address.....
11. Date of leaving the last school.....

*(Signature of Candidate in full)*

### SUBJECTS TAKEN UP BY THE CANDIDATE.

N. B. Strike out subjects not taken up.

Group A	or	Group B
(1) English (2) Mathematics (3) History and Geography (4) Samskrit (5) Any one or two of the following subjects :— (a) A modern Indian language (b) Any other Classical language* (c) A modern European language* (d) Elementary Physics and Chemistry (e) Botany (f) Drawing (g) Manual Training (h) Agriculture and Surveying	or	(1) English (2) Mathematics (3) History and Geography (4) A modern Indian language (5) Any one or two of the following subjects :— (a) Samskrit (b) Any other Classical language* (c) A modern European language* (d) Elementary Physics and Chemistry (e) Botany (f) Drawing (g) Manual Training (h) Agriculture and Surveying

\* Name the language here.

Roll No.....

## (3) BENARES HINDU UNIVERSITY.

## INTERMEDIATE EXAMINATION.

*Application.*

This application with the examination-fee must reach the University Office on or before the.....  
To

THE REGISTRAR,

BENARES HINDU UNIVERSITY.

SIR,

I request permission to present myself at the ensuing Intermediate Examination of the Benares Hindu University.

The fee\* of Rupees 20 is forwarded herewith.

I am, &amp;c.,

Student,.....College.

N. B.—Name to be written in full and clearly.

---

 CERTIFICATE.

I CERTIFY that the above-named candidate has been duly enrolled as a member of the Benares Hindu University; that he has attended a regular course of study at College in each and all of the subjects offered, for not less than two years preceding the date of the Examination; that I believe the subjoined account to be true; and that I know nothing against his character which ought to debar him from this Examination.

Name.....

Principal,.....College

The.....

N. B.—This certificate is to be signed by the Principal of the Institution at which the candidate has studied.

\* This application, with the examination-fee, must be sent in the same cover, registered, or presented by hand. The fee must be in Cash or Government Currency Notes. Half Notes and Postage Stamps will not be received.

# PARTICULARS TO BE FILLED IN BY THE CANDIDATE.

1. Name (in full).....
2. University Enrolment No.....
3. Age (in years and months) on } Years.....Months  
the first day of January, 19 }
4. Name and occupation } Name.....  
of father } Occupation.....
5. Name of guardian.....
6. Race.....
7. Religion.....
8. Caste.....
9. District and town or village where resident.....
10. Date of passing the Admission or Equivalent  
Examination (with the name of the University  
or of Province)...
11. Date of passing the Previous Examination in  
Sanskrit\*
12. Modern Indian Language for Composition †.....
13. Whether he has appeared at the Intermediate  
Examination of any previous year—Yes or No.....

*(Signature of Candidate in full).*

## OPTIONAL SUBJECTS IN WHICH THE CANDI- DATE DESIRES TO BE EXAMINED.

N. B.—Strike out subjects not taken up.

---

Group A (Arts Course) or Group B (Science Course)

Sanskrit	Mathematics or Biology
Another Classical Language †	Physics
Modern European Language †	Chemistry
Mathematics	Geology
History	Drawing
Elementary Economics	Manual Training
Logic	
Drawing	
Manual Training	

---

\* To be filled in by candidates who take up any other subject in lieu of Sanskrit, under the proviso to Reg. 7 of Chap. XXVIII.

† Name the language here.

*For Private Candidates only.*

Roll No.....

(4) **BENARES HINDU UNIVERSITY.****INTERMEDIATE EXAMINATION. •***Application.*

This application with the examination-fee must reach the University Office on or before the.....  
To

**THE REGISTRAR,****BRNARES HINDU UNIVERSITY.**

Sir,

I request permission to present myself at the ensuing Intermediate Examination of the Benares Hindu University.

The fee \* of Rs. 20/-is forwarded herewith.

I am, etc.,

Private Candidate.

Teacher.....School.

Or

Demonstrator.....College.

[N. B.—Name to be written in full and clearly].

**CERTIFICATE.**

I CERTIFY that the above-named candidate has done continuous service for not less than 18 months under me ; that two academical years have elapsed since the date of his passing the Admission Examination or an examination equivalent thereto ; that he has been duly enrolled as a member of the Benares Hindu University ; that I believe the subjoined account to be true ; and that I know nothing against his character which ought to debar him from this Examination.

Name.....

Head Master,.....School.

or

Principal,..... College.

The.....

---

\* This application, with the examination-fee, must be sent in the same cover, registered, or presented by hand. The fee must be in Cash or Government Currency Notes, Half Notes and Postage Stamps will not be received.

N. B.—This certificate is to be signed by the Headmaster of a recognised School or the Principal of a College under the University in which the candidate has put in 18 months of continuous service.

**PARTICULARS TO BE FILLED IN BY  
THE CANDIDATE.**

Name [in full].....

University Enrolment No.....

Age [in years and months] on {  
the first day of January, 19..... } ... Years...Months

Name and occupation of father. { Name.....  
Occupation.....

Name of guardian.....

Religion.....

Race.....

Caste.....

District and town or village where resident.....

Date of passing the Previous Examination in

Sanskrit\*.....

Date of passing the Admission or Equivalent Examination [with the name of the University or Province]. .....

Whether he has appeared at the Intermediate Examination of any previous year—Yes or No.....

Modern Indian Language for Composition†.....

*[Signature of Candidate in full].*

\* To be filled in by candidates who take up any other subject in lieu of Sanskrit, under the proviso to Regulation I of Chapter XXVIII.

† Name the language here.

**OPTIONAL SUBJECTS IN WHICH THE CANDI-  
DATE DESIRES TO BE EXAMINED.**

Group A [Arts Course]	Group B [Science Course]
Sanskrit	Mathematics or Biology
Another Classical Language *	Physics
Modern European Language *	Chemistry
Mathematics	Geology
History	Drawing
Elementary Economics	Manual Training
Logic	
Drawing	
Manual Training	

(5) *For Women Private Candidates only.*

Roll No.....

**BENARES HINDU UNIVERSITY.**

**INTERMEDIATE EXAMINATION.**

*Application.*

This application with the examination-fee must reach the University Office on or before the.....

To

**THE REGISTRAR,**

**BENARES HINDU UNIVERSITY.**

SIR,

I request permission to present myself at the ensuing Intermediate Examination of the Benares Hindu University

The fee† of Rs. 20/- is forwarded herewith

I am, etc.,

Private Candidate.

Address.....

(N. B.—Name & Address to be written in full & clearly).

\* Name the language here.

† This application, with the examination-fee, must be sent in the same cover, registered, or presented by hand. The fee must be in Cash or Government Currency Notes. Half Notes and Postage Stamps will not be received.

## CERTIFICATE.

I CERTIFY that the above-named candidate has been duly enrolled as a member of the Benares Hindu University; that I believe the subjoined account to be true; and that I know nothing against her character which ought to debar her from this Examination.

Name.....

Designation.....

**The.....**

N. B.—This certificate is to be signed by a Government Inspector of Schools or, in a Native State, by the Inspector of Schools or the highest educational officer in the State or a Principal of a College affiliated to a University established by an Act of the Legislature, or a Member of the Senate of the Benares Hindu University.

**PARTICULARS TO BE FILLED IN BY THE  
CANDIDATE.**

Name (in full).....

University Enrolment No.....

Age (in years and months) on }  
the first day of January, 19 .) }.....Years.....months.

Name and occupation	} Name.....
of father	

Name of guardian.....

**Religion.....**

Race.....

Caste.....

District and town or village where resident.....

Date of passing the Admission or Equivalent Examination (with the name of the University or Province).....

Date of passing the Previous Examination in Samskrit\*.....

Whether she appeared at the Intermediate Examination of any previous year—Yes or No.....

Modern Indian Language for Composition †.....

(Signature of Candidate of full).

**OPTIONAL SUBJECTS IN WHICH THE CANDIDATE DESIRES TO BE EXAMINED.**

N.B.—Strike out subjects not taken up.

Group A (Arts Course).	Group B (Science Course).
Samskrit	Mathematics or Biology
Another Classical Language †	Physics
Modern European Language †	Chemistry
Mathematics	Geology
History	Drawing
Elementary Economics	Manual Training
Logic	
Drawing	
Manual Training	

Roll No.....

(6) **BENARES HINDU UNIVERSITY.**

**B. A. EXAMINATION.**

*Application.*

This application with the examination-fee must reach the University Office on or before the.....

To

**THE REGISTRAR,**

**BENARES HINDU UNIVERSITY.**

SIR,

I request permission to present myself at the ensuing Examination for the Degree of Bachelor of Arts.

\* To be filled in by candidates who take up any other subject in lieu of Samskrit, under the proviso to Regulation I of Chapter XXVIII.

† Name the language here.



The fee \* of Rupees 30 is forwarded herewith.

I am, &c.,

Student,.....College.

N. B.—Name to be written in full and clearly.

### CERTIFICATE.

I CERTIFY that the above-named candidate has been duly enrolled as a member of the Benares Hindu University; that he has attended a regular course of study at College in each and all of the subjects offered, for not less than two years preceding the date of the Examination; that I believe the subjoined account to be true; and that I know nothing against his character which ought to debar him from graduating.

Name.....

Principal,.....College.

The .....

N. B.—This certificate is to be signed by the Principal of the Institution at which the candidate has studied.

### PARTICULARS TO BE FILLED IN BY THE CANDIDATE.

1. Name (in full).....
2. University Enrolment No.....
3. Age (in years and months on } ...Years...Months,  
the first day of January, 19... }
4. Name and occupation of { Name .....  
father. { Occupation.....
5. Name of guardian.....
6. Race.....
7. Religion.....
8. Caste.....

\* This application, with the Examination-fee, must be sent in the same cover, registered, or presented by hand. The fee must be in Cash or Government Currency Notes. Half-Notes and Postage Stamps will not be received.

9. District and town or village where resident.....
10. Date of passing the Admission or Equivalent Examination (with the name of the University or Province).-.....
11. Date of passing the Previous Examination in Samskrit \*
12. Date of passing the Intermediate Examination (with the name of the University).....
13. Whether he has appeared at the B. A. Examination of any previous year—Yes or No.....
14. Modern Indian Language for Composition†.....
15. The subject, if any, in which the candidate appears for Honours.....  
(Signature of Candidate in full).

OPTIONAL SUBJECTS IN WHICH THE  
CANDIDATE DESIRES TO BE EXAMINED.

N. B. Strike out subjects not taken up.

Samskrit

Any other Classical Language.....†

A modern European Language.....†

Philosophy

Mathematics

Political Economy and Political Philosophy

History

---

*For Private Candidates only.*

Roll No.....

(7) BENARES HINDU UNIVERSITY.

B.A. EXAMINATION.

*Application.*

This application with the examination-fee must reach the University Office on or before the.....

---

\* To be filled in by candidates who take up any other subject in lieu of Samskrit, under the proviso to Reg. 7 of Chapter XXIX.

† Name the language here.

To

THE REGISTRAR,  
BENARES HINDU UNIVERSITY.

SIR,

I request permission to present myself at the ensuing B. A. Examination of the Benares Hindu University.

The fee \* of Rupees 30/ is forwarded herewith.

I am, &c.,

Private Candidate.

Teacher,.....School.

or

*De Account Holder*

Principal,.....College.

N.B. Name to be written in full and clearly.

### CERTIFICATE.

I CERTIFY that the above-named candidate has done continuous service for not less than 18 months under me; that two academical years have elapsed since the date of his passing the Intermediate Examination; that he has been duly enrolled as a member of the Benares Hindu University; that I believe the subjoined account to be true; and that I know nothing against his character which ought to debar him from graduating.

Name .....

Head Master,.....School.

or

Principal,.....College.

The.....

N. B.—This certificate is to be signed by the Principal or Head Master of a School or College under the University in which the candidate has put in 18 months of continuous service.

---

\* This application, with the examination-fee, must be sent in the same cover, registered, or presented by hand. The fee must be in Cash or Government Currency Notes. Half Notes and Postage Stamps will not be received.

# PARTICULARS TO BE FILLED IN BY THE CANDIDATE.

1. Name (in full) .....
2. University Enrolment No. ....
3. Age (in years and months) on the } .....Years.....  
first day of January, 19..... . } Months.
4. Name and occupation of } Name.....  
father } Occupation.....
5. Race .....
6. Religion.....
7. Caste.....
8. District and town or village where resident.....
9. Date of passing the Admission or Equivalent Examination (with the name of the University) .....
10. Date of passing the Intermediate Examination (with the name of the University).....
11. Whether he has appeared at the B. A. Examination of any previous year—Yes or No.....
12. Modern Indian Language for Composition†.....
13. The subjects, if any, in which the candidate appears for Honours .....
14. Date of passing the Previous Examination in Samskrit\*.

*(Signature of Candidate in full).*

## OPTIONAL SUBJECTS IN WHICH THE CANDI- DATE DESIRES TO BE EXAMINED.

N.B.—Strike out subjects not taken up.

Samskrit

Any other Classical Language..... |

A Modern European Language..... |

Philosophy

Mathematics

Political Economy & Political Philosophy.

History

---

\* To be filled in by the candidates who take up any other subject in lieu of Samskrit, under the proviso to Regulation 7 of Chapter XXIX.

† Name the language here.

*For Women Private Candidates only.*

Roll No.....

(8) BENARES HINDU UNIVERSITY.

B. A. EXAMINATION.

P.

P.

*Application.*

This application with the examination-fee must reach the University Office on or before the.....

To

THE REGISTRAR,

BENARES HINDU UNIVERSITY.

SIR,

I request permission to present myself at the ensuing B. A. Examination of the Benares Hindu University.

The fee\* of Rs. 30 - is forwarded herewith.

I am, etc.,

Private Candidate.

Address.....

(Name and address to be written in full and clearly).

CERTIFICATE.

I CERTIFY that the above-named candidate has been duly enrolled as a member of the Benares Hindu University; that I believe the subjoined account to be true; that I know nothing against her character which ought to debar her from graduating.

Name.....

Principal,.....College.  
or Member of the Senate of the  
Benares Hindu University.

The.....

N. B.—This certificate is to be signed by the Principal of a College affiliated to a University established by an Act of the Legislature or a Member of the Senate of the Benares Hindu University.

---

\* This application, with the examination-fee, must be sent in the same cover, registered, or presented by hand. The fee must be in Cash or Government Currency Notes. Half-Notes and Postage Stamps will not be received.

**PARTICULARS TO BE FILLED IN BY THE  
CANDIDATE.**

1. Name (in full).....
2. University Enrolment No.....
3. Age (in years and )  
months on the first. } .....Years.....  
day of January, 19...) } Months.
4. Name and } Name.....  
occupation }  
of father. } Occupation.....
5. Name of guardian.....
6. Race.....
7. Religion.....
8. Caste.....
9. District and town or village where  
resident .....
10. Date of passing the Admission or Equivalent  
Examination (with the name of the University  
or Province).....
11. Date of passing the Intermediate Examination  
(with the name of the University).....
12. Date of passing the Previous Examination in  
Sanskrit\*.....
13. Whether she has appeared at the B. A.  
Examination of any previous year—Yes or  
No.....
14. Modern Indian Language for Composition  
.....
15. The subject, if any, in which the candidate  
appears for Honours.....

*(Signature of Candidate in full).*

\* To be filled in by candidates who take up any other sub-  
ject in lieu of Sanskrit, under the proviso to Regulation 7  
of Chapter XXIX.

† Name the language here.

# OPTIONAL SUBJECTS IN WHICH THE CANDIDATE DESIRES TO BE EXAMINED.

N. B.—Strike out subjects not taken up.

Sanskrit

Any other Classical Language.....\*

A modern European Language.....\*

Philosophy

Mathematics

Political Economy & Political Philosophy

History

Roll No.....

(9) BENARES HINDU UNIVERSITY.

B. SC. EXAMINATION.

*Application.*

This application with the examination-fee must reach the University Office on or before the.....

To

THE REGISTRAR,

BENARES HINDU UNIVERSITY.

SIR,

I request permission to present myself at the ensuing Examination for the Degree of Bachelor of Science.

The fee † of Rupees 30 is forwarded herewith.

I am, &c.,

Student,.....College.

N. B.—Name to be written in full and clearly.

## CERTIFICATE.

I CERTIFY that the above-named candidate has been duly enrolled as a member of the Benares Hindu University ; that he has attended a regular course of study at College, in each and all of the subjects

\* Name the language here.

† This application, with the examination-fee, must be sent in the same cover, registered, or presented by hand. The fee must be in Cash, or Government Currency Notes. Half-Notes and Postage Stamps will not be received.

offered, including courses of practical instruction in all the Science subjects offered, for not less than two years preceding the date of the examination; that I believe the subjoined account to be true; and that I know nothing against his character which ought to debar him from graduating.

Name.....

Principal,.....College.

The.....

N. B.--This certificate is to be signed by the Principal of the Institution at which the candidate has studied.

PARTICULARS TO BE FILLED IN BY THE  
CANDIDATE

1. Name (in full).....
2. University Enrolment No.....
3. Age (in years and months) }  
on the first day of Jan- } ... Years...Months.  
uary, 19. }
4. Name and occupation } Name.....  
of father. } Occupation.....
5. Name of guardian.....
6. Race.....
7. Religion.....
8. Caste.....
9. District and town or village where resident....
10. Date of passing the Admission or Equivalent Examination (with the name of the University or Province).....
11. Date of passing the Intermediate Examination (with the name of the University).....
12. Whether he has appeared at the B. Sc. Examination of any previous year—Yes or No.....

(Signature of Candidate in full).



## SUBJECTS TAKEN UP BY THE CANDIDATE.

N. B. Strike out subjects not taken up.

English

Mathematics

Physics

Chemistry

Botany

Zoology

Mineralogy

Geology

Psychology

Roll No.....

## (10) BENARES HINDU UNIVERSITY.

PREVIOUS EXAMINATION FOR THE DEGREE OF MASTER  
OF ARTS.

*Application.*

This application with the examination-fee must  
reach the University Office on or before the.....  
To

THE REGISTRAR,

BENARES HINDU UNIVERSITY.

SIR,

I request permission to present myself at the  
Previous Examination for the Degree of Master of  
Arts in \*.....

The fee † of Rupees 20 is forwarded herewith.

I am, &c ,

Student,.....College.

(Name to be written in full and clearly).

\* State the subjects of examination, and also the papers or  
Groups taken, in the case of subjects which admit of it.

† This application, with the examination-fee, must be sent  
in the same cover, registered, or presented by hand.

The fee must be in Cash or Government Currency Notes.  
Half-Notes and Postage Stamps will not be received.

## CERTIFICATE.

I CERTIFY that the above-named candidate has been duly enrolled as a member of the Bezares Hindu University; that he has attended a regular course of study at College in the subjects offered; for not less than one year preceding the date of the examination; that I believe the subjoined account to be true; and that I know nothing against his character which ought to debar him from graduating as a Master of Arts.

Name.....

Principal,.....College.

The.....

N. B.—This certificate is to be signed by the Principal of the Institution at which the candidate has studied.

PARTICULARS TO BE FILLED IN BY THE  
CANDIDATE.

- 
1. Name (in full).....
  2. University Enrolment No.....
  3. Age (in years and months on the first day of January, 19 ) } ...Years.....Months.
  4. Name and occupation of father. } Name.....  
Occupation.....
  5. Name of guardian.....
  6. Race.....
  7. Religion.....
  8. Caste.....
  9. District and town or village where resident.....
  10. Date of passing the Admission or Equivalent Examination (with the name of the University or Province).....

11. Date of passing the Intermediate Examination (with the name of the University).....
  12. Date of passing the B. A. or B. Sc. Degree Examination (with the name of the University).....
  13. Whether he has appeared at the M. A. Previous Examination of any previous year—Yes or No.....
- (Signature of Candidate in full).

Roll No.....

(11) BENARES HINDU UNIVERSITY.

FINAL EXAMINATION FOR THE DEGREE OF MASTER OF  
ARTS.

*Application.*

This application with the examination-fee must reach the University Office on or before the.....  
To

THE REGISTRAR,  
BENARES HINDU UNIVERSITY.

SIR,

I request permission to present myself at the ensuing Final Examination for the Degree of Master of Arts in\*.....

The fee† of Rupees 30 is forwarded herewith.

I am, &c.,

Student,.....College.

N. B.—Name to be written in full and clearly.

CERTIFICATE.

I CERTIFY that the above-named candidate has been duly enrolled as a member of the Benares Hindu

---

\* State the Subject of Examination and also the papers or Groups taken, in the case of subjects which admit of it.

† This application, with the examination-fee, must be sent in the same cover, registered, or presented by hand. The fee must be in Cash or Government Currency Notes. Half-Notes and Postage Stamps will not be received.

University ; that he has attended a regular course of study at College in the subject offered, for not less than one year after passing the Previous Examination in the subject ; that I believe the subjoined account to be true ; and that I know nothing against his character which ought to—debar him from graduating as a Master of Arts.

Name.....

Principal,.....College.

The.....

N. B.—This certificate is to be signed by the Principal of the Institution at which the candidate has studied.

#### PARTICULARS TO BE FILLED IN BY THE CANDIDATE.

1. Name (in full).....
2. University Enrolment No.....
3. Age (in years and months on) }  
the first day of January, 19... } ...Years...Months.
4. Name and occupation } Name.....  
of father } Occupation.....
5. Name of guardian.....
6. Race.....
7. Religion.....
8. Caste.....
9. District and town or village where resident.....
10. Date of passing the Admission or Equivalent Examination [with the name of the University or Province].....
11. Date of passing the Intermediate Examination [with the name of the University].....
12. Date of passing the B. A. or B. Sc. Degree Examination (with the name of the University).....
13. Date of passing the Previous M. A. Examination.....

14. Whether he has appeared at the M.A. Final Examination of any previous year—Yes or No...

(Signature of Candidate in full).

Roll No.....

(12) BENARES HINDU UNIVERSITY.

PREVIOUS EXAMINATION FOR THE DEGREE OF  
MASTER OF SCIENCE.

*Application.*

This application with the examination-fee must reach the University Office on or before the.....

To

THE REGISTRAR,

BENARES HINDU UNIVERSITY.

SIR,

I request permission to present myself at the Previous Examination for the Degree of Master of Science in \*.....

The fee† of Rupees 20 is forwarded herewith.

I am, &c.,

N. B.—Name to be written in full and clearly.

CERTIFICATE.

I CERTIFY that the above-named candidate has been duly enrolled as a member of the Benares Hindu University; that he has attended a regular course of study at College in the subject offered, for not less than one year preceding the date of the Examination; that I believe the subjoined account to be true; and that I know nothing against his

---

\* State the subject of examination, and also the papers or Groups taken, in the case of subjects which admit of it.

† This application, with the examination-fee, must be sent in the same cover, registered, or presented by hand. The fee must be in Cash or Government Currency Notes. Half-Notes and Postage Stamps will not be received.

character which ought to debar him from graduating as a Master of Science,

Name.....

Principal,.....College.

The.....

N. B.—This certificate is to be signed by the Principal of the affiliated Institution at which the candidate has studied.

**PARTICULARS TO BE FILLED IN BY THE  
CANDIDATE.**

1. Name (in full).....
2. University Enrolment No.....
3. Age (in years and months) }  
on the first day of Jan'y. 19 . } ... Years...Months.
4. Name and occupa- } Name.....  
tion of father } Occupation.....
5. Name of guardian.....
6. Race.....
7. Religion.....
8. Caste.....
9. District and town or village where resident...
10. Date of passing the Admission or Equivalent Examination [with the name of the University or Province].....
11. Date of passing the Intermediate Examination (with the name of the University).....
12. Date of passing the B. Sc. Examination [with the name of the University].....
13. Whether he has appeared at the M. Sc. [Previous] Examination of the previous year—Yes or No.....

*(Signature of Candidate in full).*

Roll No.....

## (13) BENARES HINDU UNIVERSITY.

FINAL EXAMINATION FOR THE DEGREE OF MASTER  
OF SCIENCE.*Application.*

This application with the examination-fee must reach the University Office on or before the.....

To

THE REGISTRAR,

BENARES HINDU UNIVERSITY.

SIR,

I request permission to present myself at the Final Examination for the Degree of Master of Science in \*.....

The fee† of Rupees 30 is forwarded herewith.

I am, &amp;c.,

Student,.....College.

N. B.—Name to be written in full and clearly.

## CERTIFICATE.

I CERTIFY that the above-named candidate has been duly enrolled as a member of the Benares Hindu University; that he has attended a regular course of study at College in the subject offered, for not less than one year after passing the Previous Examination in the subject; that I believe the sub-joined account to be true; and that I know nothing against his character which ought to debar him from graduating as a Master of Science.

Name.....

Principal,.....College.

The.....

N.B.—This certificate is to be signed by the Principal of the Institution at which the candidate has studied.

\* State the subject of examination, and also the paper or groups taken, in the case of subjects which admit of it.

† This application, with the examination-fee, must be sent in the same cover, registered, or presented by hand. The fee must be in Cash or Government Currency Notes. Half-Notes and Postage Stamps will not be recieved.

**PARTICULARS TO BE FILLED IN BY THE  
CANDIDATE.**

1. Name (in full).....
2. University Enrolment No.....
3. Age (in years and months) on the first day of January, 19... } ...Years.....Months.
4. Name and occupation of father. } Name.....,.....  
Occupation.....
5. Name of guardian.....
6. Race.....
7. Religion.....
8. Caste.....
9. District and town or village where resident...
10. Date of passing the Admission or Equivalent Examination (with the name of the University or Province ).....
11. Date of passing the Intermediate Examination (with the name of the University).....
12. Date of passing the B. Sc. Examination (with the name of the University).....
13. Date of passing the Previous M. Sc. Examination.....
14. Whether he has appeared at the M. Sc. Final Examination of any previous year—Yes or No  
.....

*(Signature of Candidate in full).*



Roll No.....

## (14) BENARES HINDU UNIVERSITY.

EXAMINATION FOR THE DEGREE OF LICENTATE

EXAMINATION.

*Application.*

This application with the examination-fee must reach the University Office on or before the.....  
.....

To

THE REGISTRAR,

BENARES HINDU UNIVERSITY.

SIR,

I request permission to present myself at the ensuing Examination for the Degree of Licentiate of Teaching.

The fee \* of Rupees 20 is forwarded herewith.

I am, &amp;c.,

Student,.....College.

N. B.—Name to be written in full and clearly.

## CERTIFICATE.

I CERTIFY that the above-named candidate has been duly enrolled as a member of the Benares Hindu University ; that he has attended a regular course of study at College, for not less than one year preceding the date of the Examination ; that I believe the subjoined account to be true ; and that I know nothing against his character which ought to debar him from graduating as a Licentiate of Teaching.

Name.....

Principal, .....College.

The.....

N. B.—This certificate is to be signed by the Principal of the Institution at which the candidate has studied.

---

\* This application, with the examination-fee, must be sent in the same cover, registered, or presented by hand. The fee must be in Cash or Government Currency Notes. Half Notes and Postage Stamps will not be received.

Roll No.....

**PARTICULARS TO BE FILLED IN BY THE  
CANDIDATE.**

- (1) Name (in full) .....
- (2) University Enrolment No.....
- (3) Age (in years and months) on }  
the first day of January, 19... } ...Years...Months.
- (4) Name and occupation } Name.....  
of father. } Occupation .....
- (5) Name of guardian .....
- (6) Race .....
- (7) Religion .....
- (8) Caste .....
- (9) Occupation of the candidate before joining the  
Training College.....
- (10) District and town or village where resident.....
- (11) Date of passing the Admission or Equivalent Exa-  
mination (with the name of the University or  
Province).....
- (12) Date of passing the Intermediate Examination  
with the name of the University).....
- (13) Date of passing the B. A. or B. Sc. Examination  
(with the name of the University).....
- (14) Whether he has appeared at the L. T. Examina-  
tion of any previous year—Yes or No.....

*(Signature of Candidate in full).*

Roll No.....

## (15) BENARES HINDU UNIVERSITY.

INTERMEDIATE EXAMINATION IN APPLIED SCIENCE  
(ENGINEERING) PART 1.*Application.*

This application with the examination-fee must reach the University Office on or before the 21st.....

.....

To

THE REGISTRAR,

BENARES HINDU UNIVERSITY.

SIR,

I request permission to present myself at the ensuing Intermediate Examination in Applied Science (Engineering), Part I.\*

The fee† of Rupees 10 is forwarded herewith.

I am, &amp;c.,

Student,..... College.

N. B.—Name to be written in full and clearly.

## CERTIFICATE.

I CERTIFY that the above-named candidate has been duly enrolled as a member of the Benares Hindu University; that he has attended a regular course of study at College in each and all of the subjects offered, for not less than one year preceding the date of the Examination; that I believe the subjoined account to be true; and that I know nothing against his character which ought to debar him from this Examination.

Name.....

Principal,..... College.

The.....

N. B.—This certificate is to be signed by the Principal of the Institution at which the candidate has studied.

\* This application, with the examination-fee, must be sent in the same cover, registered, or presented by hand.

† The fee must be in Cash or Government Currency Notes. Half Notes and Postage Stamps will not be received.

# PARTICULARS TO BE FILLED IN BY THE CANDIDATE.

1. Name (in full).....
2. University Enrolment No.....
3. Age (in years and months) on }  
the first day of January, 19....) } ...Years...Months.
4. Name and accupation } Name.....  
of father. } Occupation.....
5. Name of guardian.....
6. Race.....
7. Religion.....
8. Caste. ....
9. District and town or village where resident.....
10. Date of passing the Admission or Equivalent Examination (with the name of the University or Province ).....
11. Date of passing the Intermediate Examination (with the name of the University)
12. Whether he has appeared at the Intermediate Examination in Applied Science (Engineering) Part I, of any previous year—Yes or No.....

*(Signature of Candidate in full)*

Roll No.....

(16) BENARES HINDU UNIVERSITY.

INTERMEDIATE EXAMINATION IN APPLIED SCIENCE  
(ENGINEERING), PART II.*Application.*

This application with the examination-fee must reach the University Office on or before the.....  
.....

To

THE REGISTRAR,

BENARES HINDU UNIVERSITY.

SIR,

I request permission to present myself at the ensuing Intermediate Examination in Applied Science (Engineering), Part II\*.....

The fee † of Rupees 10 is forwarded herewith.

I am, &amp;c.,

Student,.....College

N. B.—Name to be written in full and clearly.

## CERTIFICATE.

I CERTIFY that the above-named candidate has been duly enrolled as a member of the Benares Hindu University ; that he has attended a regular course of study at College in each and all of the subjects offered, for not less than one year preceding the date of the Examination ; that I believe the subjoined account to be true ; and that I know nothing against his character which ought to debar him from this Examination.

Name.....

Principal,.....College.

The.....

N. B.—This certificate is to be signed by the Principal of the Institution at which the candidate has studied.

\* This application, with the examination-fee, must be sent in the same cover, registered, or presented by hand.

The fee must be in Cash or Government Notes. Half Notes and Postage Stamps will not be received.

**PARTICULARS TO BE FILLED IN BY  
THE CANDIDATE.**

1. Name (in full).....
2. University Enrolment No.....
3. Age (in years and months) }  
on the first day of Janu- } ...Years...Months.  
ary, 19... }
4. Name and occupation } Name.....  
of father. } Occupation.....
5. Name of guardian.....
6. Race.....
7. Religion.....
8. Caste .....
9. District and town or village where resident...
10. Date of passing the Admission or Equivalent Examination (with the name of the University or Province).....
11. Date of passing the Intermediate Examination (with the name of the University).....
12. Date of passing the Intermediate Examination in Applied Science (Engineering), Part I.....
13. Whether he has appeared at the Intermediate Examination in Applied Science (Engineering), Part II, of any previous year—Yes or No.....

*(Signature of Candidate in full).*

Roll No.....

(17) BENARES HINDU UNIVERSITY.

PREVIOUS EXAMINATION IN SAMSKRIT.

This application must reach the University Office  
on or before the.....

*Application.*

To

THE REGISTRAR,  
BENARES HINDU UNIVERSITY.

SIR,

I request permission to present myself at the  
ensuing Previous Examination in Samskrit.

I am, &amp;c.,

(Name to be written in full and clearly).

Student of .....Class

Teacher.

in the.....College  
School.

## CERTIFICATE.

I CERTIFY that the above-named candidate has  
been duly enrolled as a mem-  
ber of the Benares Hindu  
University ; that I know no-  
thing against his character  
which ought to debar him from  
this Examination and that I  
believe the subjoined account  
to be true.

This certificate is to be  
signed by the Principal  
Head Master  
of the affiliated Institu-  
tion at which the candi-  
date has studied.  
served.

Name.....

Principal.....College  
Head Master.....School

The.....

**PARTICULARS TO BE FILLED IN BY THE  
CANDIDATE.**

Name (in full).....

University Enrolment No.....

Age (in years and months) on the }  
first day of January, 19..... } ...Year...Months.

Name and Occupation } Name.....  
of father } Occupation.....

Name of guardian.....

Religion.....

Race (*i. e., nation, tribe, &c., &c.*).....

Caste, if any.....

District and town or village where resident.....

Date of passing the Admission Examination.....

Optional subjects in which to be examined.....

Whether he has appeared at this Examination on any  
previous occasion—Yes or No.....

Whether he intends to appear at the  $\frac{\text{Intermediate}}{\text{B. A.}}$   
Examination of.....

(*Signature of Candidate in full*)



(18)

॥ श्रीः ॥

## काशी-हिन्दु-विश्वविद्यालयस्य प्रवेशिका- परीक्षाया आवेदनपत्रम् ।

—:०:—

श्रीयुत—काशी-हिन्दु-विश्वविद्यालय—“ रेजिस्ट्रार ”, महोदयेषु—

अहं काशी-हिन्दु-विश्वविद्यालयस्यागामिन्यां प्रवेशिकापरीक्षाया-  
मुपस्थातुमिच्छामि । तत्रानुमतिप्रदानेनानुग्राह्योऽहं श्रीमद्भिरिति—

निवेदकः

( परीक्षार्थिनो हस्ताक्षरम् )

( पाठशाला )

अधो लिखिता विषयाः परीक्षार्थिना पाठशालाध्यक्षसमक्षं स्वहस्तेन  
लेखनीयाः ।

उपनामसहितं स्वनाम

पितृनाम

संरक्षकनाम

वयः

जातिः

मातृभाषा

स्वदेशनाम

वर्तमान-वासस्थानम्

पाठशालानाम

वैकल्पिकग्रन्थेषु परिगृहीतग्रन्थनाम

परीक्षास्थान-नाम

( पाठशालाध्यक्षस्य हस्ताक्षरम् )

॥ श्रीः ॥

(19)

P. काशी-हिन्दु-विश्वविद्यालयस्य प्रवेशिका-P.  
परीक्षायां आवेदनपत्रम् ।

—:०:—

श्रीयुत—काशी-हिन्दु-विश्वविद्यालय—“रेजिस्ट्रार”, महोदयेषु—

अहं काशी-हिन्दु-विश्वविद्यालयागामिन्यां प्रवेशिकापरीक्षायां-  
पस्थातुमिच्छामि । तत्रानुमतिप्रदानेनानुग्राह्योऽहं श्रीमन्निरिति—

निवेदकः

( परीक्षार्थिनो हस्ताक्षरम् )

उपनामसहितं स्वनाम

पितृनाम

संरक्षकनाम

वयः

जातिः

मातृभाषा

स्वदेशनाम

वर्तमान-वासस्थानम्

वैकल्पिक-ग्रन्थेषु परिगृहीतग्रन्थनाम

परीक्षास्थान-नाम

## प्रमाणपत्रम्

अयं परीक्षार्थी

प्रवेशिकापरीक्षायां प्रवेष्टुमर्हतीति प्रमाणयति ।

( प्रमाणपत्राधिकारिणो हस्ताक्षरम् )

( पदनाम )

( धाम )

(20)

प्राच्यविद्याविभागीय  
काशी-हिन्दु-विश्वविद्यालयस्य  
धर्मविज्ञानविभागीय  
**मध्यमा परीक्षाया आवेदनपत्रम् ।**

श्रोयुत—काशी-हिन्दु-विश्वविद्यालय-रेजिस्ट्रार-महोदयेषु—  
अहं काशी-हिन्दु-विश्वविद्यालयस्यागामिन्यां मध्यमापरीक्षाया-  
मुपस्थातुमिच्छामि । तत्रानुमतिप्रदानेनानुग्राह्योऽहं श्रीमद्भिरिति—

निवेदकः ।

( परीक्षार्थिनो हस्ताक्षरम् )

( पाठशाला )

अधोलिखिता विषयाः परीक्षार्थिना पाठशालाध्यक्षसमक्षं स्वहस्तेन  
लेखनीयाः ।

उपनामसहितं स्वनाम

पितृनाम

संरक्षकनाम

वयः

जातिः

मातृभाषा

स्वदेशनाम

वर्तमानवासस्थानम्

उत्तीर्णपरीक्षानाम, पूर्वाध्ययनस्थानम्

पाठशालानाम

वैकल्पिकेषु परिगृहीत-विषयनाम ग्रन्थनाम च

परीक्षास्थाननाम

( पाठशालाध्यक्षस्य हस्ताक्षरम् )

**(B) Forms for the Registration of Graduates.**

**BENARES HINDU UNIVERSITY.**

**FORM OF APPLICATION FOR ENTRY OF NAME UPON  
THE REGISTER OF GRADUATES.**

To

**THE REGISTRAR,  
BENARES HINDU UNIVERSITY,**

*Benares.*

SIR,

I request that my name be entered in the Register of Graduates maintained under Chapter X of the Regulations. I have remitted the sum of Rs. 5 as initial fee, together with Rs. 2 as the fee for the first year, or the composition fee of Rs. 20.

I have the honour to be,

Sir,

Your most obedient servant,

.....

Full name and address.

Present occupation.

Degree or Degrees taken, with  
dates mentioned in the diplomas  
of Degrees.

College from which degree was taken.

N.B.—(1) Chapter X of the Benares Hindu University Regulations, dealing with the Registration of Graduates, is printed overleaf.

(2) When Graduates apply for the entry, of their names on the Register of Graduates, after more than six months from the date on which the degree was conferred on them, the initial fee payable will be Rs. 10.

(3) Graduates applying for registration of their names, are requested to inform the Registrar from time to time of any change in their permanent address or in their occupation.

## CHAPTER X OF THE REGULATIONS.

## BENARES HINDU UNIVERSITY.

*Registration of Graduates.*

1. All graduates of the University shall, on payment of a registration fee of Rs. 5, be entitled to have their names entered on the Register of University Graduates.

2. Subject to the provision of Statute (20) (2) (vii) (*viz.*, that the Senate shall have power to maintain a register of graduates), the Register shall be kept in such form as the Syndicate shall prescribe.

3. Application for entry of name on the Register of University Graduates shall be ordinarily made within six months of the date on which the degree was conferred on the applicant at the Convocation. After the said period, applicants shall be required to pay a fee of Rs. 10.

4. Each registered graduate shall be required to pay an annual fee of Rs. 2, on or before the 31st January of each year. In case of non-payment before such date, his name shall be removed from such Register, but he shall be eligible for re-entry on payment of the fee in arrears.

5. The fees payable for admission and the annual fee payable, may be compounded on payment of Rs. 20, at any time.

6. Registered graduates shall be entitled to take part in the Convocations, and shall be entitled to such other privileges and rights as may from time to time be conferred in conformity with the Regulations.

BENARES HINDU UNIVERSITY

REGISTER OF GRADUATES.

Registered No.....	Date of Registration.....
Name.....	
Address.....	
Occupation.....	
Degree or Degrees taken, with dates.....	
Changes of Address	Changes of Occupation.



**(C) Forms for the Enrolment of Students as  
Members of the University.  
BENARES HINDU UNIVERSITY.**

FORM OF APPLICATION FOR ENROLMENT AS A MEMBER  
OF THE BENARES HINDU UNIVERSITY.

To

THE REGISTRAR,,

BENARES HINDU UNIVERSITY.

SIR,

I request permission to be enrolled as a member of the Benares Hindu University, and submit the following statement duly filled in :—

The fee of Rupees Two is forwarded herewith.

1. Name.....
  2. Age at admission.....
  3. Father's name.....
  4. Examination passed.....
  - (a) Admission (or Equivalent Examination \*), of...  
.....in the year.....
  - (b) Intermediate, of.....
  - (c) B. A. or B. Sc., of.....
  - (d) M. A. or M. Sc., of.....
  5. Name or names of College or Colleges,† if any,  
ever attended by him, and the dates of  
entering and leaving.....
- Date.....

I am, etc.,

.....  
Student,.....Year Class

Principal,.....College. ....College.

---

\* (1) Matriculation Examination of any Indian University established by an Act of Legislature. (2) The School Leaving Certificate Examination of the United Provinces. (3) The School Leaving Examination of Ajmer-Merwara. (4) The Senior Oxford Local Examination. (5) The Senior Cambridge Local Examination. (6) The Final Examination prescribed for European Schools. (7) The Diploma Examination of Chiefs' College, &c.

† In the case of students allowed by special grace of the Senate to attend lectures or carry on research in the University, the authority should be quoted.



Book No.

**Benares Hindu University.**

FOIL.

**FORM OF RECEIPT FOR ENROLMENT  
FEE.**

I beg to acknowledge the receipt of  
Rs. 2, being the fee for enrolment as a  
member of the Benares Hindu University.  
Your name has been duly enrolled as

No.

BENARES :

Registrar,  
Benares Hindu  
University.

The 192

Book No.

**Benares Hindu University.**

COUNTERFOIL.

**FORM OF RECEIPT FOR ENROLMENT FEE.**

I beg to acknowledge the receipt of Rs. 2 (Two  
only), being the fee for enrolment as a member of the  
Benares Hindu University. Your name has been duly  
enrolled as

No.

BENARES :

Registrar, Benares  
Hindu University.

The 192

# BENARES HINDU UNIVERSITY.

## REGISTER OF ENROLMENT.

1	2	3	4	5	6	7	8	9
No.	Date of enrolment.	Name.	Age at Admission or Equivalent Examination.	Father's name.	University Examination, with the name of the University or School Leaving Examination, with the name of the authority conducting the examination; passed or failed.	College to which admitted.	Date of admission, re-admission, and leaving.	REMARKS.

## UNIVERSITY REGISTRATION

[illegible]



*Book No.*  
**BENARES HINDU UNIVERSITY.**

FORM OF CERTIFIED COPY OF REGISTER  
OF STUDENTS.

1	2	3	4	5	6	7	8	9
No.	Date of enrolment.	Name.	Age at Admission.	Father's name.	University examinations passed or failed.	Roll No.	College to which admitted.	Dates of admission, re-admission, and leaving.

BENARES :

The \_\_\_\_ 19 \_\_\_\_ . } Registrar, Benares Hindu University.

**Book No.**  
**BENARES HINDU UNIVERSITY.**

FORM OF CERTIFIED COPY OF REGISTER OF  
STUDENTS.

1	2	3	4	5	6	7	8	9
Number.	Date of enrolment.	Name.	Age at Admission.	Father's name.	University examinations passed or failed.	Roll No.	College to which admitted.	Dates of admission, re-admission, and leaving.

BENARES :

The \_\_\_\_ 19 \_\_\_\_ . } Registrar, Benares Hindu University.

## काशी हिन्दू विश्वविद्यालय ।

काशी हिन्दू विश्वविद्यालय के छात्रों की श्रेणी में नाम लिखाने के लिए प्रार्थना-पत्र का फार्म

सेवा में,

श्रीयुक्त रजिस्ट्रार महोदय,

काशी हिन्दू विश्वविद्यालय

महोदय,

सेवा में निवेदन है कि मेरा नाम काशी हिन्दू विश्वविद्यालय के छात्रों की श्रेणी में लिख लेने की कृपा की जावे । निम्नलिखित विवरण तथा दो रुपया शुल्क सेवा में प्रेषित है ।

१. उपनाम सहित नाम \_\_\_\_\_ पता \_\_\_\_\_
२. जन्म की तारीख \_\_\_\_\_
३. प्रवेशिका तथा उसके बराबर मानी हुई परीक्षा देने के समय अवस्था और इसके अभाव में मध्यमा तथा उसके बराबर मानी हुई परीक्षा देने के समय अवस्था \_\_\_\_\_
४. उपनाम सहित पिता का नाम \_\_\_\_\_
५. परीक्षाएँ जो पास की हों:—  
 (१) काशी हिन्दू विश्वविद्यालय की प्रवेशिका परीक्षा तथा उसके बराबर मानी हुई...की...परीक्षा... \* से सन्...में पास की । (२) काशी हिन्दू विश्वविद्यालय की मध्यमा तथा इसके बराबर मानी हुई...की...परीक्षा...  
 \* से सन् में पास की ।

---

\* इस स्थान में उस पाठशाला, कालिज आदि का पूरा पता लिखना चाहिए जहाँ से छात्र ने उक्त परीक्षा पास की है ।

नोट:—१ निम्नलिखित परीक्षाएँ इस विश्वविद्यालय की प्रवेशिका परीक्षा के बराबर मान ली गयी हैं.

६. प्रवेशिका अथवा उसके बराबर मानी हुई परीक्षा पास करने के अनन्तर जिन कालिजों में विद्यार्थी ने अध्ययन किया हो उनका नाम और पूरा पता प्रत्येक में भरती होने और छोड़ने की तारीख सहित

७. काशी हिन्दू विश्वविद्यालय के प्राच्यविद्या विभाग कालिज में भरती होने की तारीख

उपरोक्त विद्यार्थी का प्रार्थना-पत्र शुल्क सहित सेवा में प्रेषित है।

भवदीय

(ह०) विद्यार्थी श्रेणी

प्रिंसिपल

प्राच्यविद्या

धर्मविज्ञान विभाग कालिज,

कालिज

- (क) संस्कृत कालिज बनारस की प्रथमा परीक्षा।
- (ख) पञ्जाब विश्वविद्यालय की प्राज्ञपरीक्षा।
- (ग) इस विश्वविद्यालय के साहित्य व विज्ञान विभाग की एडमिशन परीक्षा।
- (घ) सरकारी विधान के अनुसार स्थापित किसी भारतीय विश्वविद्यालय की मेट्रिक्यूलेशन परीक्षा।
- (ङ) किसी ब्रिटिश प्रदेश की स्कूललीविङ्ग सर्टिफिकेट परीक्षा।
- (च) सीनियर आक्सफोर्ड लोकल परीक्षा।
- (छ) सीनियर केम्ब्रिज लोकल परीक्षा।
- (ज) यूरोपियन स्कूलों के लिए नियत फाइनल परीक्षा।
- (झ) किसी चीफ्स कालिज की डिप्लोमा परीक्षा।

नोट १—ग, घ, ङ, च, छ, ज, झ, निर्दिष्ट परीक्षाओं के परीक्ष्य विषयों में छात्रों को संस्कृत अन्यतम विषय लेना होगा। परन्तु जिन्होंने संस्कृत नहीं भी लिया है वे भी यदि परीक्षा देकर सिंडिकेटका इस बात का सन्तोष कर सकेंगे कि उनकी संस्कृत की योग्यता पर्याप्त है तो उनको भी प्रवेश करने की आज्ञा दी जा सकेगी।

नोट २—बनारस संस्कृत कालिज की मध्यमा परीक्षा इस विश्वविद्यालय की मध्यमा परीक्षा के बराबर मान ली गई है।

पुस्तक-संख्या.....

असल

## काशी हिन्दू विश्वविद्यालय ।

विश्वविद्यालय के छात्रों की श्रेणी में नाम लिखाने के शुल्क की प्राप्ति की रसीद ।

काशी हिन्दू विश्वविद्यालय के छात्रों की श्रेणी में नाम लिखाने के शुल्क के रूप में दो रुपये प्राप्त हुए । आपका नाम नियमानुसार छात्रों की श्रेणी में दर्ज कर लिया गया ।

संख्या.....

नाम.....

काशी

रजिस्टार

ता०.....१६ काशी हिन्दू विश्वविद्यालय

रा. सा.

पुस्तक-संख्या.....

नकल

## काशी हिन्दू विश्वविद्यालय ।

विश्वविद्यालय के छात्रों की श्रेणी में नाम लिखाने के शुल्क की प्राप्ति की रसीद ।

काशी हिन्दू विश्वविद्यालय के छात्रों की श्रेणी में नाम लिखाने के शुल्क के रूप में दो रुपये प्राप्त हुए । आपका नाम नियमानुसार छात्रों की श्रेणी में दर्ज कर लिया गया ।

संख्या.....

नाम.....

काशी

ता०.....१६

रजिस्टार

काशी हिन्दू विश्वविद्यालय ।



## काशी हिन्दू विश्वविद्यालय । छात्रों का रजिस्टर

१	२	३	४	५	६	७	८	९	१०
	छात्र श्रेणी में नाम दर्ज होने की तारीख	विद्यार्थी का नाम	जन्म की तारीख	प्रवेशिका अथवा उसके बराबर मानी हुई परीक्षा के समय विद्यार्थी की अवस्था । इसके अभाव में मध्यमा अथवा उसके बरा- बर मानी हुई परीक्षा के समय विद्यार्थी की अवस्था	पिता का नाम	किसी विश्वविद्या- लय अथवा अन्य संस्था की उन परीक्षाओं का नाम और सत्र जिनमें विद्यार्थी उत्तीर्ण अथवा अनुत्तीर्ण हुआ, विश्वविद्या- लय अथवा अन्य परीक्षा लेनेवाली संस्था के नाम सहित	उस कालिग और श्रेणी का नाम जिसमें वि- द्यार्थी भरती हुआ है	प्रथम बार अथवा पुन- वार प्रवेश करने की अथवा छोड़- ने की तारीख	विवरण



**(D) Forms of Certificates and Diplomas.****(i) Certificates.**

No.....

BENARES HINDU UNIVERSITY.



ADMISSION EXAMINATION, 19 .

Roll No.....

This is to certify that.....  
 of.....School.....  
 aged... ..years and.....months, passed the  
 Admission Examination held in the month of.....  
 .....19 , and was placed in the.....  
 Class.

The subjects in which he was examined were  
 English, Mathematics, History and Geography.....  
 .....and.....

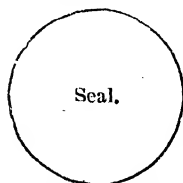
BENARES HINDU UNIVERSITY : }  
 The.....19 . }

*Registrar.*

(2)

No.....

BENARES HINDU UNIVERSITY.



INTERMEDIATE EXAMINATION, 19 .

Roll No.....

Enrolment No.....

I certify that.....of  
 .....College ....., passed the Intermediate

Examination, held in the month of.....19.....,and  
was placed in the.....Class.

The subjects in which he was examined were  
English, Logic—Deductive and Inductive—and Classi-  
cal Language (.....) and History (.....)  
or Mathematics, Biology, Physics and Chemistry.

BENARES HINDU UNIVERSITY : }  
The.....19 . } Registrar.

(3)

No.....

BENARES HINDU UNIVERSITY.



PREVIOUS EXAMINATION FOR THE DEGREE OF  
MASTER OF ARTS, 19 .

Roll No..... Enrolment No.....

I certify that.....  
passed the Previous Examination for the Degree of  
Master of Arts held in the month of.....  
19....., in....., and was placed in the.....  
Class.

BENARES HINDU UNIVERSITY : }  
The.....19 . } Registrar.

(4)

No.....

## BENARES HINDU UNIVERSITY.



PREVIOUS EXAMINATION FOR THE DEGREE OF  
MASTER OF SCIENCE, 19

Roll No.....

Enrolment No.....

I certify that.....  
passed the Previous Examination for the Degree of  
Master of Science held in the month of.....19...  
in.....  
and was placed in the.....Class.

BENARES HINDU UNIVERSITY : }

The.....19 . }

Registrar.

(5)

No.....

## BENARES HINDU UNIVERSITY.



INTERMEDIATE EXAMINATION IN ENGINEERING  
(PART I).

## APPLIED SCIENCE.

Roll No.....

Enrolment No.....

I certify that.....  
of the Engineering College, passed the Intermediate  
Examination in Engineering (Part I) held in the  
month of.....19....., and was placed in the  
.....Class.

The subjects in which he was examined were Mathematics, Building and Surveying, Engineering Physics, Chemistry and Metallurgy, Engineering and Mechanical Drawing.

BENARES HINDU UNIVERSITY : }

The.....19 . }

Registrar.

(6)

No.....

BENARES HINDU UNIVERSITY.

Seal.

INTERMEDIATE EXAMINATION IN ENGINEERING  
(PART II).

APPLIED SCIENCE.

Roll No..... Enrolment No.....

I certify that.....  
of the Engineering College passed the Intermediate Examination in Engineering (Part II) held in the month of.....19....., and was placed in the .....Class.

The subjects in which he was examined were:--

1. Mathematics.
2. Heat Engines.
3. Applied Mechanics.
4. Practical Geometry.
5. Electrical Engineering.
6. Mechanical Drawing.

*Sessional marks for the first two years.*

Workshops.....per cent.

Drawing Office.....per cent.

Engineering Laboratory.....per cent.

BENARES HINDU UNIVERSITY : }

The.....19 . }

Registrar.

(7)

No.....

## BENARES HINDU UNIVERSITY.

Seal.

## PREVIOUS EXAMINATION IN SAMSKRIT, 19 .

Roll No.....

This is to certify that.....  
 son of.....of .....  
 College.....aged.....years and.....  
 months, passed the Previous Examination in Samskrit  
 held on.....19.....

BENARES HINDU UNIVERSITY : }

The.....19 . }

Registrar.

(8)

No.....

## BENARES HINDU UNIVERSITY.

Seal.

## PRAVESIKA EXAMINATION, 19 .

Roll No. ....

वर्षीयः

शततमे वैक्रमाब्दे काशीहिन्दुविश्वविद्यालयसम्बन्धि  
प्रान्यविद्या  
 धर्मविज्ञान विभागीय प्रवेशिकापरीक्षायां  
 कक्षायासुत्तीर्ण इति प्रमाणीकरोति

नाः

१९ .

Registrar.

No...

## काशी हिन्दू विश्वविद्यालय

Seal.

### मध्यमापरीक्षा संवत्—

क्रमसंख्या.....  
 श्री.....  
 श्रीमतः.....स्यपुत्रः  
 .....निवासी  
 वर्षायः.....शततमे वैक्रमान्दे  
 काशी हिन्दू विश्वविद्यालय सम्बन्धि प्राच्यविद्या विभागीय  
 धर्मविज्ञान  
 मध्यमा परीक्षायां.....कदायामुत्तीर्ण  
 इति प्रमाणी करोति  
 विषयाः.....  
 .....वैकल्पिकाः.....  
 तिथिः.....रजिस्ट्रार

### (ii) *Diplomas.*

(1) BENARES HINDU UNIVERSITY.

Seal.

### BACHELOR OF ARTS.

This is to certify that.....  
 obtained the Degree of Bachelor of Arts in this  
 University in the Examination of 19.....,  
 and that he was placed in the.....Class.

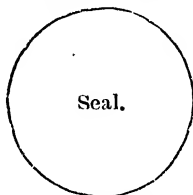


The subjects in which he was examined were  
English Literature,.....  
and.....

BENARES HINDU UNIVERSITY : }

The.....19 . } Vice-Chancellor.

(2) BENARES HINDU UNIVERSITY.



BACHELOR OF SCIENCE.

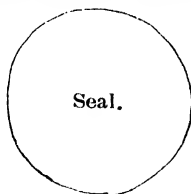
This is to certify that.....  
obtained the Degree of Bachelor of Science in this  
University in the Examination of 19 , and that he  
was placed in the.....Class.

The subjects in which he was examined were  
English, Chemistry,.....  
and.....

BENARES HINDU UNIVERSITY : }

The.....19 . } Vice-Chancellor.

(3) BENARES HINDU UNIVERSITY.



MASTER OF ARTS.

This is to certify that.....  
obtained the Degree of Master of Arts in this

University in the Examination of 19 , in.....,  
and that he was placed in the.....Class.

BENARES HINDU UNIVERSITY: }  
The.....19 . } *Vice-Chancellor.*

---

(4) BENARES HINDU UNIVERSITY.



MASTER OF SCIENCE.

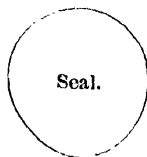
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This is to certify that.....  
obtained the Degree of Master of Science in this  
University in the Examination of 19 , in.....,  
and that he was placed in the.....Class.

BENARES HINDU UNIVERSITY: }  
The.....19 . } *Vice-Chancellor.*

---

(5) BENARES HINDU UNIVERSITY.



LICENTATE OF TEACHING.

---

This is to certify that.....  
obtained the Degree of Licentiate of Teaching in this

University in the Examination of 19 ; and that he  
was placed in the..... Class in  
Theory and in the..... Class in  
Practice.

BENARES HINDU UNIVERSITY : }

The.....19 " . }

Vice-Chancellor.

(6)

## काशी हिन्दू विश्वविद्यालय



शास्त्री परीक्षा संवत्.....

क्रमसंख्या.....

श्री.....

श्रीमान.....स्य पुत्रः

.....निवासी

वर्षीयः.....शततमे वैक्रमाब्दे

काशी हिन्दू विश्वविद्यालय सम्बन्धि प्राच्यविद्या विभागीय  
धर्मविज्ञान

शास्त्री परीक्षायां.....कक्षायांमुत्तीर्णं

इति प्रमाणी करोति

विषयाः.....

.....वैकल्पिकाः.....

तिथिः.....

बाइसचान्सेलर.

**SYLLABUS AND TEXT-BOOKS.****1918.****INTERMEDIATE EXAMINATION.**

*(Same as the Allahabad University Course for 1918.)*

**B. A. EXAMINATION.**

*(Same as the Allahabad University Course for 1918.)*

**B. Sc. EXAMINATION.**

*(Same as the Allahabad University Course for 1918.)*

**M. A. PREVIOUS EXAMINATION.**

*(Same as the Allahabad University Course for 1918.)*

**M. A. FINAL EXAMINATION.**

*(Same as the Allahabad University Course for 1918.)*

**M. Sc. PREVIOUS EXAMINATION.****Chemistry.**

There will be two papers, each of three hours' duration. There will also be a *practical* examination.

*Theoretical.*

The subjects of examination will be—

Organic Chemistry.

Inorganic Chemistry.

The history of the atomic theory and atomic weight determinations.

Physical Chemistry.

*Practical.*

Complex Inorganic Analysis (Qualitative).

Volumetric and Gravimetric Analysis.

Complete analysis of at least *two Indian minerals of economic importance* and of some of the common alloys.

Identification of common organic substances.

The following experiments in Physical Chemistry :—

*Surface tension, viscosity and transition point.*

The candidate will continue the study of the special subject taken in the B. Sc., under para 7, and may submit to the examiner his work along with samples of the substance or substances prepared to show the progress he has made during the year. The examiner will take this into account in marking for the practical examination.

Books suggested for study and reference :—

*(Theoretical).*

OSTWALD : Principles of Chemistry.

ROSCOE AND SCHOLEMMER : Inorganic Chemistry, Parts I and II.

MELLOR : Higher Mathematics for Students of Physics and Chemistry.

ARMITAGE : History of Chemistry.

WALKER : Physical Chemistry.

JONES : Elements of Physical Chemistry.

FENTON : Physical Chemistry.

BERNTHSEN : Organic Chemistry.

COHEN : Advanced Organic Chemistry.

*(Practical).*

MELLOR : Quantitative Analysis.

CLOWES AND COLEMAN : Quantitative Analysis.

TREADWEL AND HALL : Analytical Chemistry.

SUTTON : Volumetric Analysis.

THORPE : Industrial Chemistry.

SUDBOROUGH : Practical Organic Chemistry.

WESTON : Identification of Organic Compounds.

SPENCER, L. J. : World's Minerals.

### Physics.

The subjects of Examination are :—

- (i) Properties of Matter.
- (ii) Heat.
- (iii) Sound.

A candidate shall be required to have a sound knowledge of the experimental side of the above subjects, and also such knowledge of the theoretical side of each as may be obtained by the applications of the Calculus and Differential Equations. In addition to the above, the candidate shall be required to have a *detailed advanced knowledge, experimental and theoretical of one special subject*. The candidate may either select any subject from the following list or take up any other subject, provided that, in the latter case, he applies at least six months before the date of the examination and the subject is approved by the Syndicate on the recommendation of the Board of Studies in Physics.

#### SPECIAL SUBJECTS.

1. Elasticity and Strength of Materials.
2. General Theory of Vibrations, with Illustrations.
3. Wave-motion in Fluids.
4. Advanced Thermodynamics and Laws of Radiation.
5. Kinetic Theory of Gases and Gas Laws.
6. Heat Conduction and Radiation.
7. Dynamical Theory of Sound.
8. Thermometry and Pyrometry.

There shall be THREE papers, each of three hours' duration :

- I. Properties of Matter and Sound.
- II. Heat.

### III. Special subject selected by the candidate.

The scope of the examination is approximately indicated by the following text-books:—

POYNTING AND THOMSON : Properties of Matter.

PRESTON : Theory of Heat.

PLANK : Thermodynamics.

BARTON : Sound.

For the *special* subject, students are required to consult their Professors as to a suitable course of reading, which should include the study of Original Papers and recent advances, as described in Standard Scientific Journals.

There shall be a Practical Examination in Physics in the subjects offered by the candidate.

Books recommended:—

WATSON : Text-books of Practical Physics.

KOHLRAUSCH : Physical Measurements.

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### Other subjects.

(As in the Allahabad University.)

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### M. Sc. FINAL EXAMINATION.

(Same as the Allahabad University Course for 1918.)

### PRAVESIKA EXAMINATION.

#### Sanskrit.

N. B. Sanskrit shall be written in the Devanagari script.

There will be THREE papers.

*First Paper*—

#### EITHER

(a) Valmikiya Ramayana, Sarga 1, and Raghu-vamśa, Sargas 1-5.

#### OR

(b) Veda Samhita, with Svāra (either Sukla Yajus, 5 Adhyayas, or Kṛiṣṇa Yajus, 5 Adhyayas, or Rīgveda

Pavamana Suktam, or Sāmaveda Rudrādhyāya, or Atharvaveda, 5 Adhyayas)

*Second Paper—*

Panchatantra, (expurgated) (First two Tantras only.)

*Third Paper—*

Grammar, any one of the following options :—

- (i) Laghu Kaumudi (to the end of बुद्धि).
- (ii) Aṣṭādhyāyī [Sabdarûpâvali, Dhâturûpâvali, Dhâtupâtha, Samaschakra]
- (iii) Sanksiptasâra.
- (iv) Prayogaratnamâlâ.
- (v) Jainendravr̥tti.
- (vi) Sârasvatachandrikâ (First half).
- (vii) „ (Second half).
- (viii) Mugdhbodha.
- (ix) Kalâpa.
- (x) Supadmavyākaraṇa.
- (xi) Prakriyâ Kaumudi.
- (xii) Bhâṣâvr̥tti.

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**Indian Vernaculars.**

There will be ONE paper in each of the Indian Vernaculars. The following books are prescribed :—

**(A) Hindi.**

- (i) Ramacharitamânasa (Tulsi), Sitâswayamvara portion. (University Book Depôt)
- (ii) Hindi Mahâbhârata, by Mahavira Prasada Dvivedi (Selections) (University Book Depôt)

**(B) Bengali.**

- (i) Sitâr Vanavâṣa.
- (ii) Bhârata Bhikṣâ.
- (iii) At-ti-galpa.



**(C) Gujarati.**

- (i) Karanaghelo.
- (ii) Kâvyadohana.

**(D) Maratî.**

- (i) Gadyaratnamâlâ.
- (ii) Mahâbhârata (*Sabhâ Parva*), by Moropant.

**(E) Uriya.**

- (i) Prabandhamâlâ.
- (ii) Kavitasamgraha.

**(F) Telugu.**

- (i) Nitichandrikasandhi.
- (ii) Bhaskarasatakam.

**Mathematics.**

There will be ONE paper in Arithmetic.

Syllabus prescribed—

Addition, Subtraction, Multiplication, Division,  
Simple Fractions and Rule of Three.

**History and Geography.**

There will be ONE paper.

History of India, by Babu Kalika Singha, M. A.,  
B. T.

Geography of India.

**Further Course in Samskrit Grammar and Literature.**

There will be ONE paper.

*Text-book* :—

Amarakôṣa, or  
Nighantu.

**Elementary Logic.**

There will be ONE paper.

*Text-book* :—

Tarka Samgraha, or  
Nyayadîpika (Jain).

**English.**

Of the Lower Middle standard of U. P.

**Drawing and Manual Training.**

*As in the Admission Examination.*

**Agriculture and Surveying.**

*As in the Admission Examination.*

**1919.****ADMISSION EXAMINATION.**

(A) FOR CANDIDATES FROM THE CENTRAL HINDU SCHOOL (*Same as in the Allahabad University Matriculation Examination for 1919*).

(B) FOR PRIVATE CANDIDATES.

(Courses prescribed by the Benares Hindu University, as follows):

**English.**

There will be two papers, each of three hours' duration. The *first* will be on the text-books of poetry and prose prescribed by the University, with questions on English usage and idiom bearing on them. The *second* will consist of easy exercises in paraphrase and composition, and of exercises in composition based on the subject-matter of books prescribed for general or "non-detailed" study.

N. B.—Alternative questions will be set, at least to the extent of half the number of questions in each paper.

**TEXT-BOOKS.****1. Poetry—**

Anthology of Verse for Indian Schools, edited by Thomson (Macmillan & Co., Ltd.), the following sections:—

Narrative Poems,

Patriotic Poems,

and

the following other poems:—

THE SCHOLAR—Southey.

ABOU BEN ADHEM AND THE ANGEL--Leigh Hunt.

OUR CASUARINA TREE--Toru Dutt.

THE DAY IS DONE--Longfellow.

SONG--Christina Rossetti.

A FAREWELL--Tennyson.

ARIEL'S SONG--Shakespeare.

2. *Prose*—

KINGSLEY: Heroes (Blackie and Son's edition);

RUSKIN: King of the Golden River (Longman's Class Books of English Literature).

3. *Non-detailed Stud*

SISTER NIVEDITA: Cradle Tales of Hinduism (Longmans).

LAMB: Tales from Shakespeare.

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### Mathematics.

There will be two papers in Mathematics, *one* paper in Arithmetic and Algebra, and a *second* paper in Geometry, each of three hours' duration.

The courses shall be as follows:—

(1) *Arithmetic*.---The whole of Arithmetic. (The use of Algebraical symbols and processes will be permitted).

(2) *Algebra*.---The four simple rules. Fractions. Greatest Common Measure. Least Common Multiple. Factors. Remainder Theorem. Proportion. Easy Surds. Theory of Indices. Simple Equations of one or more unknown quantities with easy problems. Easy Quadratic Equations. Elementary Graphs.

(Candidates will be provided with squared paper.)

(3) *Geometry*.---Practical and Theoretical Geometry.

The questions on Practical Geometry will be set on the constructions contained in the annexed Schedule A, together with easy extensions of them.

All figures should be drawn accurately, for which purpose every candidate should provide himself with a graduated scale, a pair of set-squares, a protractor, a compass and a hard pencil.

The questions on Theoretical Geometry will consist of theorems contained in the annexed Schedule B, together with easy extensions and deductions, with numerical illustrations. Any proof of a proposition will be accepted which appears to the Examiners to form part of a systematic treatment of the subject. The order in which the theorems are stated in Schedule B, is not imposed as the sequence of their treatment. In the proof of the theorems, hypothetical constructions will be permitted.

*(Candidates will be provided with squared paper.)*

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### SCHEDULE A.

Bisection of angles and of straight lines.

Construction of perpendiculars to straight lines.

Construction of an angle equal to a given angle.

Construction of parallels to a given straight line.

Simple cases of construction from sufficient data of triangles and quadrilaterals.

Division of straight lines into a given number of equal parts or into parts in any given proportions.

Construction of a triangle equal in area to a given polygon.

Construction of tangents to a circle and of common tangents to two circles.

Simple cases of the construction of circles from sufficient data.

Construction of a fourth proportional to three given straight lines and a mean proportional to two given straight lines.

Construction of regular figures of 3, 4, 6, or 8 sides in or about a given circle.

Construction of a square equal in area to a given polygon.

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## SCHEDULE B.

### ANGLES AT A POINT.

If a straight line stands on another straight line, the sum of the two angles so formed is equal to two right angles ; and the converse.

If two straight lines intersect, the vertically opposite angles are equal.

### PARALLEL STRAIGHT LINES.

When a straight line cuts two other straight lines, if

- (i) a pair of alternate angles are equal, or
- (ii) a pair of corresponding angles are equal,  
or
- (iii) a pair of interior angles on the same side of the cutting line are together equal to two right angles, then the two straight lines are parallel ; and the converse.

Straight lines which are parallel to the same straight line are parallel to one another.

### TRIANGLES AND RECTILINEAL FIGURES.

The sum of the angles of a triangle is equal to two right angles.

If the sides of a convex polygon are produced in order, the sum of the angles so formed is equal to four right angles.

If two triangles have two sides of the one equal to two sides of the other, each to each, and also the angles contained by these sides equal, the triangles are congruent.

If two triangles have two angles of the one equal to two angles of the other, each to each, and also one side of the one equal to the corresponding side of the other, the triangles are congruent.

If two sides of a triangle are equal, the angles opposite to these sides are equal; and the converse.

If two triangles have the three sides of the one equal to the three sides of the other, each to each, the triangles are congruent.

If two right-angled triangles have their hypotenuses equal, and one side of the one equal to one side of the other, the triangles are congruent.

If two sides of a triangle are unequal, the greater side has the greater angle opposite to it; and the converse.

Of all the straight lines that can be drawn to a given straight line from a given point outside it, the perpendicular is the shortest.

The opposite sides and angles of a parallelogram are equal; each diagonal bisects the parallelogram, and the diagonals bisect one another.

If there are three or more parallel straight lines and the intercepts made by them on any straight line that cuts them are equal, then the corresponding intercepts on any other straight line that cuts them are also equal.

#### AREAS.

Parallelograms on the same or equal bases and of the same altitude are equal in area.

Triangles on the same or equal bases and of the same altitude are equal in area.

Equal triangles on the same or equal bases are of the same altitude.

Illustrations and explanations of the geometrical theorems corresponding to the following algebraical identities :-

$$\begin{aligned}
 k(a+b+c+\dots) &= ka+kb+kc+\dots \\
 (a+b)^2 &= a^2+2ab+b^2 \\
 (a-b)^2 &= a^2-2ab+b^2 \\
 a^2-b^2 &= (a+b)(a-b)
 \end{aligned}$$

The square on a side of a triangle is greater than, equal to, or less than, the sum of the squares on the other two sides, according as the angle contained by those sides is obtuse, right, or acute. The difference in the case of inequality is twice the rectangle contained by one of the two sides and the projection on it of the other.

#### LOCI.

The locus of a point which is equidistant from two fixed points is the perpendicular bisector of the straight line joining the two fixed points.

The locus of a point which is equidistant from two intersecting straight lines consists of the pair of straight lines which bisect the angles between the two given lines.

#### THE CIRCLE.

A straight line drawn from the centre of a circle to bisect a chord which is not the diameter, is at right angles to the chord ; conversely, the perpendicular to a chord from the centre bisects the chord.

There is one circle and one only which passes through three given points not in a straight line.

In equal circles (or, in the same circle), (i) if two arcs subtend equal angles at the centres, they are equal ; (ii) conversely, if two arcs are equal, they subtend equal angles at the centres.

In equal circles (or, in the same circle), (i) if two chords are equal, they cut off equal arcs (ii) conver-

sely, if two arcs are equal, the chords of the arcs are equal.

Equal chords in a circle are equidistant from the centre ; and the converse.

The tangent at any point of a circle and the radius through the point, are perpendicular to one another.

If two circles touch, the point of contact lies on the straight line through the centres.

The angle which an arc of a circle subtends at the centre, is double that which it subtends at any point on the remaining part of the circumference.

Angles in the same segment of a circle are equal ; and if the line joining two points subtends equal angles at two other points on the same side of it, the four points lie on a circle.

The angle in a semi-circle is a right angle, the angle in a segment greater than a semi-circle is less than a right angle, and the angle in a segment less than a semi-circle is greater than a right angle.

The opposite angles of any quadrilateral inscribed in a circle are supplementary ; and the converse.

If a straight line touch a circle and from the point of contact a chord be drawn, the angles which this chord makes with the tangent, are equal to the angles in the alternate segments.

If two chords of a circle intersect either inside or outside the circle, the rectangle contained by the parts of the one is equal to the rectangle contained by the parts of the other.

### PROPORTION : SIMILAR TRIANGLES.

If a straight line is drawn parallel to one side of a triangle, the other two sides are divided proportionally ; and the converse.



If two triangles are equiangular, their corresponding sides are proportional; and the converse.

If two triangles have one angle of the one equal to one angle of the other, and the sides about these equal angles proportional, the triangles are similar.

The internal bisector of an angle of a triangle divides the opposite side internally, in the ratio of the sides containing the angle, and likewise the external bisector externally.

The ratio of the areas of similar triangles is equal to the ratio of the squares on corresponding sides.

The following books are suggested :—

1. A School Arithmetic for Indian Schools, by Hall, Stevens and Sims.

2. Longmans' Senior Arithmetic (Indian edition), by Dexter and Garlick, adapted for use in India by C. Pollard.

3. Baker and Bourne's Elementary Algebra, Part. 1

4. K. P. BASU'S Algebra, Part. I.

5. HALL AND STEVENS : A School Geometry, Parts I-V.

### History and Geography.

There will be two papers, each of three hours' duration.

#### *Paper I—*

(a) Outlines of the History of England.

Books recommended :—

G. TOWNSEND WARNER : A Brief Survey of British History.

or

C. W. C. OMAN : Junior History of England.

or

S. R. GARDINER : Outlines of English History.

(b) History of India.

Books recommended :—

HARAPRASAD SHASTRI: School History of  
India. .

or

VINCENT A. SMITH: Oxford Students' His-  
tory of India.

or

R. C. DUTT: A Brief History of Ancient and  
Modern India brought up to date, by J. N  
Gupta, M. A., I. C. S.

*Paper II.*—General and Physical Geography.

A.—The Elements of Astronomical, Mathema-  
tical and Physical Geography.

The Solar system ; Eclipses, Rotation and  
Revolution of the Earth, and their effects. Climatic  
zones. Latitude and Longitude. Time. Principles  
of Map-Drawing. Shape of the Earth. Geological  
structure of the Earth. Rocks and Volcanoes.  
Ocean movements. The effects of Climate. Rivers  
and their work. Soil and its characteristics.

Atmosphere, Air, Wind, Storm, Cyclones and  
Water Spouts. Formation of Desert and Mountains,  
and their influences on the surrounding countries.

B.—General Geography of the World in outline,  
with India in fuller detail, with special reference to  
the following :—

Relief, Climate and Rainfall ; Soil & Products ;  
Industries and Commerce ; Communication and  
Population.

LONGMAN'S Geographical Series for India, Book II,  
is recommended.

HERBERTSON'S Junior Oxford Geography may also  
be consulted.

### Sanskrit.

There will be two papers in Sanskrit, each of three hours' duration. *One* will be on the text-books prescribed, with questions on grammar and idiom. The *second* will consist of passages for translation from English into Sanskrit.

#### *Paper I—*

Vālmîkiya Rāmāyaṇa—Selections (University Book Depôt.)

Hitopadêsa (Expurgated Edition).

Châṇakyanîti (Expurgated).

Grammar—

Shabdarûpāvalī, Dhâturûpāvalī. Simple rules of Syntax and Compounds.

#### *Paper II—*

Translation—from English into Sanskrit.

N. B. *Sanskrit shall be written in the Devanagari script.*

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### Any other Classical Language. Arabic and Persian.

There will be two papers, each of three hours' duration. *One* will be on the text-books prescribed, with questions on grammar and idiom. The *second* will consist of passages of unseen prose for translation into English or Urdu or Hindi, as well as a number of short sentences for translation from English or Urdu or Hindi into the Classical Language.

#### (a) *Arabic.*

*Majani-ul-Adab*, by Louis Cheikho : Vol. I, pages 7-23 and 41-152. (Published by the Imprimerie Catholique, Beyrout, Syria, sold by the Book Depôt at Aligarh).

*For supplementary reading :*

*Majani-ul-Adab*, Vol. I, pages 234-276.

**(b) Persian.**

*Gulistan* of Sa'di. Book I. (omitting the preface)

*Bahâristan* of Jâmi. (First two chapters).

*Bustan* of Sa'di. , Book I.

*For supplementary reading :*

Shah's Diary. (First Journey).

*Qand-i-Parsi*. (Aligarh).

**Indian Vernaculars.**

There will be two papers, each of three hours' duration. The *first* paper will be set from the prescribed books of poetry and prose, with questions on grammar and idiom, while the *second* will be a paper on composition, consisting of an essay or letter, or both. Some of the questions in the second will be on the subject-matter of books prescribed for supplementary reading, in case such books have been prescribed.

**TEXT-BOOKS.**

**(a) Hindi.**

(1) Tulsidâsa's *Râmâyana* (Nagari Pracharini-Sabha Edition) Bâlakânda, from

अवधपुरी रघुकुल-मणि राज ।

वेद-विदित तेहि दसरथ नाज ॥

to the end.

(2) *Satya Harish Chandra*, by Bhâratendu Harish Chandra.

(3) Hindi Grammar.

**(b) Urdu.**

(1) *Guldasta-t-Adab* (The Indian Press, Ltd., Allahabad).

(2) *Nâdir-ul-Qawâid*, by Lala Harnam Das (The Indian Press, Ltd., Allahabad).

**(c) Bengali.**

(1) *Meghanâdabadha Kâvya* (মেঘনাদবধ কাব্য), by Madhusudan Dutt, Canto I.

(2) *Kathâ-o-Kâhini* (কথা ও কাহিনী), by Rabindranath Tagore.

(3) *Sitâr Banavâsa* (সীতার বনবাস), by Ishwar Chandra Vidyâsâgara.

(4) *Bhâshâ-Bodha* (ভাষাবোধ), by Nakuleshwar Bhattacharya.

#### (d) *Marathi*.

*Prose* :—

L. G. LELE : Gadyaratnasamgraha.

*Poetry* :—

Navanita (published by the Education Department, Bombay).

*Grammar* :—

DAMLE : Marathi Grammar.

#### (e) *Gujarati*.

*Karana Ghelo*, by Nandshanker (School Edition)

*Mamerun*, by Kavi Premananda.

*Forbes Viraha*, by Kavi Dalpatram.

*Samaramu Somhita*, by Narsingrao B. Divatia.

#### (f) *Tamil*.

*Prose and Poetry* :—Selections prescribed by the Madras University for each year.

*For supplementary reading* :—

(i) *Vivekachandrika*, by T. A. Swaminath Iyer.

(ii) Youth and Character or the History of Two Boys, by C. B. Venkataraman Iyer of R. L. T.

#### (g) *Telugu*.

*Prose and Poetry* :—Selections prescribed by the Madras University for each year.

*For supplementary reading* :—

*Kamalini*, by Mrs. Alwar Chetti.

*Abraham Lincoln*, by S. Harisarvothama Rao, M. A.

## **A Modern European Language :**

**(French, German, Italian).**

*(Courses not prescribed.)*

## **Elementary Physics and Chemistry.**

There will be two papers, *one* in Physics and *another* in Chemistry, each of three hours' duration, and a simple practical examination in each subject

### **(A) *Physics.***

The following syllabus is prescribed :

1. **GENERAL.**—Simple ideas about Matter, Inertia, and Force. Physical States of Matter. Units of Length, Area and Volume. Measurements of Length, Area and Volume. Mass and Weight. Law of Universal Gravitation. Balance. Methods of Weighing. Density and Specific Gravity. Elementary Idea about the Principle of Archimedes.

2. **HEAT.**—Effect of Heat on Solids, Liquids and gases. Change of Volume. Change of Temperature. Thermometer. Quantity of Heat. Specific Heat. Change of State. Melting Point. Boiling Point. Latent Heat. Evaporation. Condensation. Distillation.

3. **LIGHT.**—Rectilinear Propagation of Light. Shadows. Reflection of Light by Plane and Spherical Mirrors. Real and Virtual Images. Refraction of Light through a rectangular glass plate and prism Images by Lenses.

4. **MAGNETISM.**—Magnets and Magnetic substances. Magnetic Force. The Earth as a Magnet. Earth's Magnetic force, only directive and not attractive. The Compass.

5. **ELECTRICITY.**—The Production of Electricity by Friction. Kinds of Electric Charges. Properties

of a charged body. Conductors and Insulators. Electrostatic Induction. Gold-leaf-Electroscope. Electrophorus. Simple Frictional Machine, *c. g.*, Ramsden.

Electric Current. Simple Voltaic Cells. Effect of current on a magnetic needle. Galvanoscope. Simple experiments on heating and lighting effects by electric current.

The candidates shall be required to perform the important experiments, illustrating the principles studied.

Books suggested :

GANOT: Natural Philosophy (Longmans Green & Co.).

GREGORY AND HADLEY: A Class Book of Physics (Macmillan).

### (B) *Chemistry.*

1. The study of matter through the sense organs; observation of the following properties:—

Colour; transparency or opacity; shape, size; crystalline structure and texture (as seen through a lens, if necessary); fracture or cleavage (to be studied in common salt, mica and Iceland spar).

Sound, produced by a body itself, or when it is let fall or struck.

Odour and taste, if any.

Cold or warm; yielding to pressure or not.

Weight and relative density. Balance.

Effect of heat and cold; melting and boiling points.

Solid, liquid, gas.

2. Solution, emulsion, mixture. Solubility in different liquids, water, alcohol, ether.

Filtration, crystallisation, distillation and sublimation.

1 and 2 to be studied with the following :—

Salt, nitre, chalk, marble, calcite (Iceland spar), lime, sand, quartz, blue vitriol, green vitriol, sulphur, rubber, carbonate of soda, iron, zinc, lead, tin, mixture of sand and sal ammoniac, camphor, shellac, oil, fat, charcoal.

3. The study of air, rusting of metals, active and inactive gases in air, burning of phosphorus in air, combustion and slow combustion studied with iron, magnesium, phosphorus, candle, charcoal, sulphur.

4. Oxygen gas prepared from red oxide of mercury, chlorate of potash and black oxide of manganese. Properties of oxygen.

5. Hydrogen gas prepared from zinc and sulphuric acid. Properties of hydrogen.

6. Nitrogen gas prepared from air and from a mixture of ammonium chloride and sodium nitrite. Properties of nitrogen.

7. Chlorine and hydrochloric acid, preparation and properties.

8. Study of water. Action of sodium and magnesium on water. Action of steam on red-hot iron. Electrolysis of water.

9. Carbonic acid gas, obtained by burning charcoal in air, and by the action of acids on chalk, carbonate of soda and *kankar*.

10. *Elements and Compounds*—Chemical combination and decomposition, studied with reference to the foregoing substances.

A *practical examination* of a simple character will also be held in the course prescribed above.



Books suggested :—

SINCLAIR AND M'ALLISTER: First Year's Course of Chemistry.

L. M. JONES: Introductory Chemistry.

### Botany.

The structure and germination of the seed. The conditions necessary for germination. Bean or Pea. Castor Oil Seed, and the grain of Maize may be taken as examples.

The forms of normal and adventitious roots. The functions and adaptations of roots.

The stem and its branching. The bud. Underground stems and their distinction from roots. The modifications of the stem.

N. B.—The forms of roots and stems should be taught by taking familiar types. For instance, *Colocasia* (kochu) and *Zingiber* (ahdi) may be taken as examples of Corm and Rhizome, respectively, etc., etc.

*Leaf*—Phyllotaxis; simple and compound leaf. The distinction of a compound leaf from a branch. The description of a simple leaf, according to the following scheme :—

Deciduous or evergreen? Alternate or opposite (superposed or decussate)? Petiolate or sessile? Stipulate or exstipulate? Sheathing? Ligulate? etc.

The outline of the lamina (Linear, lanceolate, oval, oblong, orbicular, ovate, cordate, or pinnatifid, palmatifid, etc.)? venation? margin? apex? surface? (glaucous, hairy, etc.).

Flower and inflorescence. Types of inflorescence, raceme, spike, umbel, capitulum and panicle.

The parts of flower and the number of parts. The description of flower, according to the following scheme :—

Sessile or pedicellate? Bracteate or ebracteate? Complete or incomplete? Hermaphrodite or unisexual? Actinomorphic, Zygomorphic or Asymmetrical?

*Calyx*.—Poly or gamosepalous? green or petaloid? if polysepalous, the number, outline and apex of the sepals? if gamosepalous, the number and nature of the incisions? if of any special form? inferior or superior?

*Corolla*.—Regular or irregular? if irregular, Zygomorphic or Asymmetrical? Poly or gamopetalous? if polypetalous, number and outline of petals, or any special terms? if gamopetalous, special form or incision? corona or other special features? Hypogynous, Perigynous or Epigynous?

*Andræcium*.—Number of stamens or indefinite. Polyandrous, syngenesious or adelphous? Epipetalous? Hypo—, Peri—, or Epi-gynous? special characters regarding length and arrangement; e.g., di- or tetra-dynamous? Fixation of anthers (innate, adnate, dorsifixed or versatile)? dehiscence (introrse, extrorse, etc.)?

*Gynæceum*.—Mono—, bi etc., or Poly-carpellary? apocarpous or syncarpous?

*Ovary*.—Unilocular or multilocular? superior or inferior? *ovules*,—number or indefinite? *form*? *placentation*? *style*? *stigma*.

*Fruit*.—Definition. Kind of fruit. Seed and fruit dispersal.

*Physiology*.—Simple experiments on Photosynthesis, Transpiration and Respiration.

There will be two papers, each of three hours' duration and a simple practical examination.

Paper I will deal with (a) the structure and germination of the seed and (b) the morphology and description of stem, root, and leaves.

Paper II will deal with (a) morphology and description of inflorescence, flower and fruit, and (b) Physiology.

The subject should be taught, as far as possible, practically. There shall be no microscopic work.

#### PRACTICAL WORK.

Candidates will be required to dissect (with or without the aid of a lens), describe and draw parts of plants prescribed in the Syllabus.

Further, the candidates are expected to keep a record of all practical work done in the Laboratory in a note-book, which will be liable to examination by the University Examiners.

The following books are suggested for the use of the teacher :—

J. M. LOWSON: A Text-book of Botany (Indian Edition).

OLIVER: Elementary Botany.

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#### Drawing and Manual Training.

*(Courses not prescribed.)*

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#### Agriculture and Surveying.

*(Courses not prescribed.)*

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### INTERMEDIATE EXAMINATION.

*(Same as the Allahabad University Course for 1919).*

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### B. A. EXAMINATION.

*(Same as the Allahabad University Course for 1919).*

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### B. Sc. EXAMINATION.

*(Same as the Allahabad University Course for 1919).*

## M. A. PREVIOUS EXAMINATION.

### Sanskrit.

There will be FIVE papers, each of three hours' duration.

*Sanskrit shall be written in the Devanagari script.*

#### *Paper I.—*

- (a) Rigveda, with Sâyaṇa Bhâṣya (Mandala I, Suktas 1-7).
- (b) Kāṭha Upaniṣad, with Sāṅkara Bhâṣya.
- (c) Vedic Grammar: Siddhântakaumudī—Vaidiki Prakriyâ.

#### *Paper II.—*

Sarvasiddhântasaṅgraha (Ed. by Rangâcharya).  
Sāṅkhya-Kārikâ, with Tattvakaumudī.  
Bhâṣâparichehchhêda.

#### *Paper III.—*

Śiṣupâlavadha—1 and 2.  
Kirâtârjuniya—1 and 2.  
Madhya-Kaumudī.

#### *Paper IV.—*

Prâkṛtalakṣaṇa.  
Mr̥chchhakaṭika.  
Sâhityadarpaṇa—Ch. 10.

#### *Paper V.—*

- (a) Macdonnell's History of Sanskrit Literature (75 marks).
- (b) Buhler's Indian Paleography (with Plates), or Gauri Shankar Ojha's Prâchinalekhamâlâ (25 marks).

### English.

There will be NINE papers for the M. A. Examination, each of three hours' duration, any four of which will be for the Previous and the other five for the Final.

Two papers will be in poetry, one in texts, from Chaucer to the end of the 18th century, and the other in texts of the 19th and 20th centuries. There will be two "corresponding papers in prose, and two in drama, one on at least four representative plays of Shakespeare and the other on other specimens of English Dramatic Literature. There will also be a paper on representative specimens of English Criticism, and two others, one in the History of English Literature and the other in Essay-writing, on an advanced literary subject. A knowledge of the History of English Literature will be demanded of the student, not only in the special paper on the subject, but also on all the papers on text-books, and the examination in Shakespeare will include a general acquaintance with Shakespearian Art and Criticism.

N. B. --Alternative questions will be set at least to the extent of half the number of questions in each paper.

1. *Poetry, Part I.*

CHAUCER : Prologue.

MILTON : Paradise Lost, Books I-IV.

POPE : Essay on Man.

GRAY : Odes.

2. *Poetry, Part II.*

WORDSWORTH : Selections, Part I (Macmillan).

SHELLEY : Selections (English Romantic Poets,  
Cambridge University Press).

BYRON : Childe Harold's Pilgrimage, Canto I.

TENNYSON : In Memoriam.

RABINDRANATH TAGORE : The Gardener.

3. *Prose, Part I.*

MORE : Utopia.

English Essays : Selected by Peacock. Bacon  
to Goldsmith (Oxford University Press).

MILTON : Areopagitica.

GOLDSMITH : Citizen of the World.

Do. Vicar of Wakefield.

RICHARDSON : Pamela.

4. *Prose, Part II.*

LANDOR : Imaginary Conversations

(Scott Library).

MACAULAY : Essay on Milton.

English Essays : Goldsmith to Stevenson.

Selected by Peacock (Oxford University Press).

WALTER PATER : The Renaissance.

GEORGE ELLIOT : Romola.

DICKENS : Oliver Twist.

5. *Drama—Part I (Shakespeare).*

Romeo and Juliet.

Much Ado About Nothing.

King Lear.

The Tempest.

Books recommended :—

SIR SIDNEY LEE : Life of Shakespeare.

SIR WALTER RALEIGH : Shakespeare.

DOWDEN : Shakespeare's Mind and Art.

BRADLEY : Shakespearean Tragedy.

MOULTON : Shakespeare as a Dramatic Artist.

6. *Drama—Part II.*

MARLOWE : Tamburlaine.

SHERIDAN : The Rivals.

SHELLEY : Prometheus Unbound.

BERNARD SHAW : Captain Brassbound's Conversion.

Books recommended :—

SHELLING : English Drama (Dent's Channels of English Literature).

WARD : Dramatic Literature.

*Criticism.*

SIDNEY : Apology for Poesie.

ADDISON : Criticisms on Paradise Lost.

WORDSWORTH : Prefaces (Heath &amp; Co.)

ARNOLD : Essays on Criticism (Second Series).

MEREDITH : Essay on Comedy.

Books recommended :—

SAINTSBURY : History of English Criticism.

HUDSON : Introduction to the Study of Literature

COURTHOPE : Life in Poetry and Law in Taste.

8. *History of English Literature.*

Books recommended :—

SAINTSBURY : History of English Literature.

LANG : History of English Literature.

For reference :—

WARD : English Poets.

CRAIK : English Prose.

MORLEY : English Men of Letters Series.

HUDSON : Introduction to the Study of Literature (Harrap).

COWL : Theory of Poetry in England (Macmillan.)

HEPPLE : Lyrical Forms in English (Cambridge University Press).

COURTHOPE : History of English Poetry.

CHAMBER'S Cyclopædia of English Literature.

Cambridge History of English Literature.

Oxford Book of English Verse.

PALGRAVE : Golden Treasury.

9. *Essay.*

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**Pali.**

There will be FOUR papers, each of three hours' duration.

Paper I.—

Pali Grammar—Emulus.

Selections from Mahāvamsa.

„ „ the Jātakas.

**Paper II.—**

Dhammapada.

Pūḍgalapannati, with Commentary.

**Paper III.—**

Milindapanha.

Dīpavamsha.

**Paper IV.—**

Composition.

**Any other Classical Language. Arabic  
and Persian**

There will be THREE papers in the Previous Examination and FOUR in the Final examination, each of three hours' duration. In the *Previous examination*, there will be papers on (i) prose text-books, (ii) unseen prose and verse translation, and (iii) translation into the language; while, in the *Final*, there will be papers on (i) essay in the classical language on some literary subject, (ii) questions to be answered in English or Urdu or Hindi on the history of the language and the literature, (iii) on the verse text-books, and (iv) on the special selected subject.

**(A) Arabic.**

*Maqamat* of Hariri (whole).

*Diwan* of Hamasa (whole).

*Diwan* of Mutanabbi.

Travels of Ibn Batuta.

*Farazdaq* (first half).

**Recommended for study:**

Nicholson's *Literary History of the Arabs*  
(Fisher Unwin).

Special subject to be chosen from the following:—

(i) Arabic History and Geography.

(ii) Arabic Logic and Philosophy.

(iii) The Quran and Quranic Exegesis.



- (iv) Modern Egyptian Arabic, as exhibited in Green's Grammar and Selections (Oxford Clarendon Press.)
- (v) Semitic Philology, with special reference to Wright's Comparative Semitic Grammar (Cambridge University Press.)

**(B) *Persian.***

*Waqa'i*, of Ni'mat Khan.

*Akhlâq-i-Jalâli*.

Letters of Abul-Fazl.

*Diwan* of Saib.

*Qasidas* of Anwari.

*Shâhnâma* of Firdausi.

*Tazkirat-us-Shu'ara* of Daulat Shah.

Recommended for study :—

Browne's Literary History of India (Fisher Unwin).

*Shi'r-ul-'Ajam*, by Shibli. (Dar-ul-Musannifin, Azamgarh).

Special subject to be chosen from the following :—

- (i) Old Persian Inscriptions, as given in Tolman's book (American Book Company).
- (ii) Avesta Grammar, and Selections from the Avesta, published by A. V. Williams Jackson.
- (iii) The differences between modern and classical Persian, as shown in Roger's Persian Plays, the Vazir-i-Lankuran, and Philott's Modern Persian Stories (Asiatic Society of Bengal).
- (iv) Persian Philology, with special reference to Gray's Indo-Iranian Philology (Columbia University Press).

## **Philosophy.**

There will be **THREE** papers, each of three hours' duration.

**PAPER I**—History of European Philosophy—Ancient and Mediæval Periods, with particular attention to the Philosophy of Plato and Aristotle.

Books recommended for study :—

- (1) **ZELLER** : History of Greek Philosophy.
- (2) **TURNER** : History of Philosophy (Mediæval Period).
- (3) **ZELLER** : Plato and Aristotle.

Books that may be consulted :—

**BUTLER** : Lectures on Ancient Philosophy.  
**ADAMSON** : Development of Greek Philosophy.  
**WEBER** : History of Philosophy (Mediæval Period).  
**WINDELAND** : History of Philosophy.  
**WALLACE** : Philosophy of Aristotle.

**PAPER II**—History of European Philosophy—Modern Period, with particular attention to English Empiricism and the Philosophy of Kant.

Books recommended for study :—

- (1) **FALCKENBERG** : History of Modern Philosophy.
- (2) **RUSSEL** : Selections from Locke.

**FRASER** : Selections from Berkeley, 5th edition (Principles of Human Knowledge).

**HUME** : Treatise on Human Nature, Book I.

- (3) **WATSON** : Selections from Kant (Critique of Pure Reason).

Books that may be consulted :—

**HOFFDING** : History of Modern Philosophy and Modern Philosophers.

PERRY: Recent Philosophy.

ERDMAN; History of Philosophy.

LESLIE STEPHEN: English Thought in the Eighteenth Century.

GREEN: Introduction to Hume's Treatise, Book I.

PAULSEN: Philosophy of Kant.

PAPER III.—Outlines of Indian Philosophy.

Books recommended for study:—

(1) *Saddarshana-Samuchchaya* of Haribhadra, with Commentary of Manibhadra.

(2) *Sariraka Bhasya*—Adhyaya II, Padas 1 and 2.

Books that may be consulted:—

*Sarvadarsana Sangraha*,

MAX MULLER: Six Systems of Indian Philosophy.

IYENGAR: Outlines of Hindu Philosophy.

J. C. CHATTERJI: Hindu Realism.

DEUSSEN: Philosophy of the Upanishads.

### History.

PAPER I—(International Law and Politics).

HALL: Treatise on International Law.

GETTELL: Introduction to Political Science.

DE BURGH: Legacy of Greece and Rome.

HAMMOND: Comparative Politics.

PAPER II—(Subject chosen for the examination of 1919—'23: England from 1865 to 1885).

H. PAUL: History of M. England, Vols. 3 and 4.

MORLEY: Life of Gladstone, Bks. 5-8.

Cambridge Modern History.

PAPER III—(A period of cultural history or a select personage. Subject chosen for the examination of 1919-'23:—Periclean Greece).

HOLM: History of Greece, Vol. 2.

THUCYDIDES: History, tr. by Dale, 2 Vols. (G. Bell).

GREENIDGE: A Handbook of Greek Constitutional History (Relevant chapters only).

W. FOWLER: *City State of the Greeks and Romans*.  
(Relevant chapters only).

MAHAFFY: *Social Life in Greece*.

*History of Classical Greek Literature*,  
2 Vols (Relevant chapters only).

G. MURRAY: *Euripides and His Age* (Home University).

#### PAPER IV.—

An essay on any subject included in the course.

#### PAPERS V-VII.

##### A Group.

(i) (Ancient Hindu India).

RAPSON: *Indian Coins*.

SCHOFF: *Periplus*.

MCCRINDLE: *Megasthenes and Arrian*.

SHAMA SASTRI: *Artha Sastra*, Eng. tr.

MACDONELL: *History of Samskrit Literature*.

KÆGI: *Rig Veda*.

FLEET: *Gupta Inscriptions (Corpus Inscript. Indic., Vol. III)*.

[The student is expected to possess an up-to-date knowledge of the Ancient Geography of India].

(ii) (The Buddhistic World).

KERN: *Manual of Indian Buddhism*.

BUHLER: *Indian Sect of Jainas*.

BEAL: *Buddhist Records of the Western World*,  
2 Vols.

*Asoka's Inscriptions*, as in *Epigraphia Indica*,  
Vol. II.

GILES: *Civilisation of China* (Home University).

(iii) (The Ancient East).

HALL: *Ancient History of the Near East*.

BUDGE: *Egyptian Religion*.

MASPERO: *Art in Egypt* (Heinemann).

[The student should consult—

L. W. KING's *History of Sumer and Akad*.

„ „ „ *Babylonia*.

BUDGE: History of Egypt.

JASTROW: Civilisation of Babylonia and Assyria.]

# PAPERS V-VII.

## B Group.

### (i) (Mediaeval India).

ELLIOT AND DOWSON, Vols. 2-4.

J. N. SARKAR: History of Aurangzib.

TOD: Rajasthan, Vol. I. (Sketch of the Feudal System and Annals of Mewar).

V. A. SMITH: Akbar, the Great Moghal.

HAIG: Historic Landmarks of the Deccan (Pioneer Press).

GRANT DUFF: History of the Mahrattas, Vols. 1 and 2, Ch. 1-7 (or, to the death of Madhav Rao, 1772).

### (ii) (The Islamic World outside India).

MUIR: The Caliphate, new ed., by Weir.

Cambridge Mediaeval History, Vol. II. Chs. 10-12.

LANE POOLE: History of Egypt under the Arabs (Methuen).

“ “ Moors in Spain (Story of Nations).

### (iii) (Mediaeval Europe).

Cambridge Mediaeval History, Vols. 1-3.

BRYCE: Holy Roman Empire.

V. DURUY: History of the Middle Ages (G. Bell).

E. JENKS: Law and Politics in the Middle Ages (Murray).

SEIGNEOS: Mediaeval Civilisation.

# PAPERS V-VII.

## C. Group.

### (i) (British India, a select period ; from Cornwallis to Wellesley, *Fifth Report*, ed. by Firmin-ger, Vol. I.

M M. D. L. T.—History of Haidar Naik and Tipu Sultan.

**S. OWEN** : Selections from Wellesley's Despatches  
Selections from Wellington's Indian Despatches.

**DUFF** : History of the Mahrattas, Vol III., Chs. 3-15.

**MILL AND WILSON** : History of India, Bk. VI, being  
Vols. 5 and 6 of the Fourth Edition.

(ii) (India under the Crown).

**A. RANGASWAMI AIYANGAR** : Indian Constitution.

**P. MUKHERJI** : Indian Constitutional Documents.  
[And other books to be announced later].

(iii) (Economic History of India from 1500 A. D.)

**MACPHERSON** : History of European Commerce  
with India.

**BLOCHMAN AND JARRETT** : Ain-i-Akbari, Vols. 1 & 2.

**TAVERNIER** : Travels, tr. by Ball.

**J. N. SARKAR** : India of Aurangzib : statistics, topography and roads.

**BADEN POWELL** : Land Revenue in British India.

**S. C. ROY** : Famines in India.

**R. C. DUTT** : Economic History of British India,  
2 Vols.

Moral and Material Progress. Decennial Reports,  
1901 and 1911.

The candidate may offer any three of the above  
seven papers at the Previous (and the other  
four at the Final) examination. No exchange  
of papers between Groups A, B, and C is  
allowed.

### **Political Economy and Political Philosophy.**

**PAPER I, General Economics.**

Books recommended :—

**MARSHALL** : Principles of Economics.

**TAUSSIG** : Principles of Political Economy.

**KEYNES** : Scope and Method of Political Economy.

**CARVER** : Distribution of Wealth.

**CLARK** : Essentials of Economic Theory.

**PAPER II. Economic History and History of Economic Thought.**

(Students will be expected to show a knowledge of the general history of the 19th century, as outlined in such an elementary book as Robinson's Development of Europe, Vol. II).

Books recommended :—

MEREDITH : Economic History of England.

GIBBINS : History of European Commerce in the 19th century.

ASHLEY : Modern Tariff History.

TAUSSIG : Tariff History of the United States.

CHOLMELY : Protection in Canada and Australia.

R. C. DUTT : India under Early British Rule and India in the Victorian Age.

GIDE AND RIST : History of Economic Doctrines.

HANEY : History of Economic Thought.

**PAPER III. Principles and History of Political Philosophy.**

BLUNTSCHLI : Theory of State.

GREEN : Lectures on Political Obligation.

JETHRO BROWN : Underlying Principles of Modern Legislation.

DUNNING : History of Political Theories, 2 Vols.

E. BARKER : Political Thought from Spencer to to-day.

RANGASWAMI IYENGAR : Some Aspects of Ancient Indian Polity.

**PAPER IV. Essay on some Economic or Political subject.**

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**Mathematics.**

The Examination shall consist of FOUR papers, each of three hours' duration.

**I. (a) Integral Calculus :—**

Definite Integrals. Multiple Integrals, including Green's Theorem and Dirichlet's Theorem. Line and Surface Integrals, and use of Fourier's Series.

**(b) Differential Calculus :—**

Maxima and minima of functions of two or more independent variables, multiple points, curve tracing, change of variables and Jacobians.

EDWARD'S Differential Calculus and FROST'S Curve Tracing are recommended.

**II. (a) Solid Geometry, as in Bell's Geometry of Three Dimensions.**

**(b) Differential equations, as in Murray's "Differential Equations," or the corresponding parts of Forsyth's Differential Equations.**

**III. Statics :—**

Forces in three dimensions. The principle of work. Centre of gravity. Strings. Attractions and potentials of rods, discs, spheres and spherical shells. Laplace's, Poisson's and Gauss's Theorems.

ROUTH'S Statics and LONEY'S Statics are recommended

**IV. (a) Dynamics of a particle, as in Loney's "Dynamics of a Particle and of Rigid Bodies," Chapters I-X.**

**(b) Rigid Dynamics, limited to two dimensions, including Lagrange's equations and their applications to easy problems.**

ROUTH'S Elementary Treatise on Rigid Dynamics, Chapters I-IV.

OR

Loney's "Dynamics of a Particle and of Rigid Bodies." Chapters XI-XV, XVII-XIX are recommended



**M.A. FINAL EXAMINATION.**

*(Same as the Allahabad University Course  
for 1919.)*

**M. Sc. EXAMINATION.****Mathematics.**

**(PREVIOUS).**

*(Same as in M. A. Previous for 1919, vide  
pp. 264-265 above).*

**(FINAL).**

The Examination shall consist of FOUR papers, each of three hours' duration. Candidates are required to offer Group A and one of the Groups B and C.

**GROUP A.**

(1) Algebra, Tigonometry and Theory of Equations, as in Chrystal's Algebra, Part II, Chapter XXXI, Chapter XXXV, Arts. 1-18.

HOBSON'S Trigonometry, Chapters XIII-XVIII.

BURNSIDE AND PANTON'S Theory of Equations. Part I, and Chapter XIII of Part II.

(2) Analytical Conics and Differential Equations, as in Salmon's Conic Sections, Chapters IV, IX, XIV, XIX, and

FORSYTH'S Differential Equations, excluding general linear equations with variable co-efficients, solution by definite Integrals, Jacob's method and partial differential equations of the second and higher orders with variable co-efficients.

**GROUP B.**

(1) Astronomy and Lunar Theory.

GODFRAY'S Astronomy and MOULTON'S Celestial Mechanics are recommended.

(2) **Hydrostatics and Hydrodynamics**, as in BESANT and RAMSAY'S *Hydromechanics*, Part I, excluding Chapters IX and X,  
and

BASSETS' *Elementary Hydrodynamics*, Chapters I, II, III, IV, VI, VII.

#### GROUP C.

(1) **Theory of Aggregates and Theory of Functions**, as in FORSYTH'S *Theory of Functions of a Complex Variable*, Chapters I-IV.

HOBSON'S *Theory of Functions of a Real Variable*, articles 1-40, 45-56, 77, 78, 164-184, 200-204, 250-254, 424 and notes A and B of Dr. Ganesh Prasad's *Differential Calculus*.

(2) **Non-Euclidean Geometry and Differential Geometry**, as in COOLIDGE'S *Non-Euclidean Geometry* and EISENHART'S *Differential Geometry*.

### Chemistry.

#### (A) PREVIOUS.

(Same as for 1918, vide pp. 229-231 above.)

#### (B) FINAL.

There will be FOUR papers (one Inorganic, two Organic, one Physical and Historical Chemistry), each of three hours' duration. There will also be a *practical* examination.

The subjects of the examination will be :—

Inorganic Chemistry,  
Organic Chemistry,  
Physical Chemistry, and  
History of Chemistry.

Candidates are expected to have acquaintance with recent work connected with one of the first three branches mentioned above. They should be able to refer to, and abstract the recent chemical literature from, Scientific Journals.

A candidate may offer to take up translation from French, German or old Sanskrit technical literature (Dictionary being allowed). The examiners will take this into consideration in deciding the result of the examination.

#### PRACTICAL EXAMINATION.

Simple experiments in Physical Chemistry.

Organic analysis, Gas analysis.

Qualitative and Quantitative analysis of *any four* of important Indian minerals of economic value other than those taken up for the Previous M. Sc. Examination.

The candidate will conclude his study of the special subject selected under para. 7 of the B. Sc. Syllabus, and will submit to the examiner the whole work done by him during the four years with the prepared samples. The examiner will take this work into account in deciding the result of the examination.

Books suggested for reference and study, in addition to those prescribed for the Previous Examination :—

RICHTER : Organic Chemistry.

EMIL FISCHER : Organic Preparations.

STEWART : Recent Advances in Organic Chemistry.

MAYER : History of Chemistry.

WANT'S HOFF : Lectures on Theoretical and Physical Chemistry.

WERNER : New Ideas in Inorganic Chemistry.

NERNST : Theoretical Chemistry.

P. C. Roy : History of Hindu Chemistry, Vol. I.

STEWART : Recent Advances in Physical and Inorganic Chemistry.

THORPE : Industrial Chemistry.

ROGERS : Industrial Chemistry.

Chemical Society Annual Reports.

Papers in current Scientific Journals.

LASSER COHN: Laboratory Manual of Organic Chemistry.

MEYER TINGLE: Determination of Radicals in Carbon Compounds.

FINDLAY: Practical Physical Chemistry.

FRANCIS GREY: Practical Physical Chemistry.

### Physics.

#### (A) PREVIOUS.

(Same as for 1918, vide pp. 231-32 above.)

#### (B) FINAL.

The subjects of examination are *Light, Electricity and Magnetism*.

A candidate shall be required to have a sound knowledge of the experimental side of the above subjects, and also such knowledge of the theoretical side of each as may be obtained by the applications of the Calculus and Differential Equations. In addition to the above, the candidate shall be required to have a *detailed advanced knowledge, experimental and theoretical, of one special subject*. The candidate may either select any subject from the following list or take up any other subject, provided that, in the latter case, he applies at least six months before the date of the examination, and the subject is approved by the Syndicate on the recommendation of the Board of Studies in Physics.

#### *Special Subjects.*

1. Electromagnetic Theory of Light.
2. Geometrical Optics and Theory of Optical Instruments.
3. Spectroscopy.
4. Theory of Electricity and Magnetism.

5. Electrolysis and Theory of Solutions.

6. Radio-activity and the Electron Theory.

There shall be THREE papers, each of three hours' duration :

I—Light.

II—Electricity and Magnetism.

III—Special subject selected by the candidate.

The scope of the examination is approximately indicated by the following text-books :—

PRESTON : Theory of Light.

WOOD : Physical Optics.

DRUDE : Optics.

FOSTER, ATKINSON and PORTER : Electricity and Magnetism.

CAMPBELL : Modern Electrical Theory.

STARLING : Electricity and Magnetism.

For the *special* subject, students are required to consult their Professors as to a suitable course of reading, which should include the study of Original Papers and recent advances as described in Standard Scientific Journals.

The candidate shall also present a *Thesis*, consisting of a record (published or not) of advanced work or of an essay on some scientific questions of importance involving criticism or historical research.

There shall be a Practical Examination in Physics, in the subjects offered by the candidate.

Books recommended :—

WATSON : Text-book of Practical Physics.

KOHLRAUSCH : Physical Measurements

MANN : Manual of Advanced Optics.

M. Sc. students will be required to show that they possess a practical acquaintance with the handling of laboratory machines, *e. g.*, Laboratory Dynamos and Motors, Oil and Petrol Engines, Charging Accumulators, Projection Lantern, etc.

**Zoology.**

(PREVIOUS.)

The Structure, Development, Bionomics, and Distribution in Space and Time of Typical representatives and other examples illustrative of the general characters of the principal sub-divisions of each phylum of the Animal Kingdom.

The standard of the examination is approximately indicated by such text-books as Parker and Haswell's "A Text-book of Zoology," 2nd Edition, 2 Vols. and Sedgwick's "Student's Text-book of Zoology," 3 Vols.

There will be THREE papers, as mentioned below, each of three hours' duration :—

Paper 1 will deal with the Comparative Anatomy and Embryology of Non-chordate Groups ;

Paper 2 will deal with the Comparative Anatomy and Embryology of Chordate ;

Paper 3 will deal with the element of Palæontology and the Geographical Distribution of Animals.

**PRACTICAL WORK.**

There will also be a practical test.

All aspects of the subject to be studied, as much as possible, from a practical standpoint.

(FINAL)

The subjects for examination shall be—

(a) The general principles of Biology, comprising various theories of evolution, and the subjects of variation, adaptation, inheritance, and sex.

(b) A detailed knowledge of some subject or group to be announced at least one year previous to the date of the examination.

Division (a) shall consist of TWO papers, each of three hours' duration. Paper 1 shall comprise the

history and general principles of Biology, including the facts and theories of evolution and the subject of variation, adaptation, selection, isolation, reversion, etc.; paper 2 shall comprise the facts and theories of heredity, sex, experimental morphology and embryology, bionometrics, etc.

Division (b) shall also consist of two papers (papers 3 and 4), dealing with the specified subject or group selected.

Each paper shall be of three hours' duration, and there shall also be a *practical* examination. (Examiners appointed to set papers 3 and 4 will collaborate, to obviate overlapping of questions in the two papers).

#### PRACTICAL WORK.

A selected subject shall be studied, as much as possible, from the practical standpoint. A selected group shall be studied primarily from the local fauna available in the United Provinces, but also from other examples of important types.

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#### Mineralogy.

(*Courses not prescribed.*)

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#### Geology.

(*Courses not prescribed.*)

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### EXAMINATION FOR THE DEGREE OF LICENTIATE OF TEACHING.

The subjects of the examination are the Theory and Practice of Teaching.

#### THEORY.

There will be *four* papers set, as follows:—

- (1) Principles of Teaching.
- (2) History of Education.
- (3) Methods of Teaching.
- (4) School Management and Hygiene.

*Course of Studies.***1. PRINCIPLES OF TEACHING, including—**

(a) A general treatment of Psychology such as is found in an elementary text-book of the nature of "James' Talks to Teachers."

(b) A fuller treatment of the following points, dealing especially with their reference to the actual work of Teaching :—

The presentative and representative elements of consciousness ; association and apperception ; interest ; attention and memory ; the main mental differences between childhood and adolescence.

**2. HISTORY OF EDUCATION :—**

(a) Outline study of the educational theories of the following :—

Comenius, Locke, Rousseau, Pestalozzi, Froebel and Herbart.

(b) Outline study of the development of education in India from the beginning of the 19th century.

(c) Outline study of the Hindu ideals of education, including the relations between teachers and pupils.

**3. METHODS OF TEACHING :—**

Methods and apparatus suitable for the teaching of the various subjects of the curriculum of secondary schools in India.

Students will be expected to be acquainted with recent development in methods in countries other than India.

**4. SCHOOL MANAGEMENT AND HYGIENE :—**

(a) Home work, note-books, correlation of subjects, discipline and class management, class records, time-tables.



(b) Common infectious diseases, their signs and prevention ; simple casualties ; eyesight and hearing ; fatigue ; natural ventilation ; arrangement of class-rooms ; school furniture ; physical exercise.

#### PRACTICAL TEACHING.

(a) Practice by students, supervised by the College staff.

(b) Criticism lessons—two by each student.

(c) Demonstration lessons—these are given by members of the staffs of the College and the Central Hindu School.

#### BOOKS SUGGESTED.

##### *Principles of Education.*

1. JAMES : Talks to Teachers.
2. DEXTER AND GARLICK : Psychology for the School-room.
3. LLOYD MORGAN : Psychology for Teachers.
4. DUMVILLE : Child-mind.

##### *Method.*

1. Suggestions for the consideration of Teachers.
2. LANDON : The Principles and Practice of Teaching and Class Management.
3. ADAMSON : The Practice of Instruction.
4. WREN : The Indian Teacher's Guide.
5. WREN : The "Direct" teaching of English in Indian Schools.
6. COLLAR AND CROOK : School Management and Methods of Instruction.
7. MACKENZIE : Instruction in Indian Secondary Schools.
8. DEXTER AND GARLICK : A Primer of School Methods.

*School--Management.*

1. LONDON : School-mangement. .
2. WREN : Indian School Organization. ,
3. COLLAR AND CROOK : School Management and  
Methods of Instruction.

*Hygiene.*

1. LYSTER : School Hygiene.
2. SHAW : School Hygiene.

*History of Education.*

(A) INDIAN.

1. BHAGAVAN DAS : The Laws of Manu in the  
light of Theosophy (Chapter III only).
2. MAZUMDAR : A History of Education in An-  
cient India.
3. NARENDRANATH LAW : Promotion of Learning  
in India during Mohamedan Rule.
4. ZUTSHI : Education in British India.
5. MAHMOOD : The History of English Educa-  
tion in India, 1781-1893.

(B) FOREIGN.

1. GREAVES : Great Educators of Three Centu-  
ries.
2. MONROE : Text-Book in the History of Educa-  
tion.

**PRAVESIKA EXAMINATION.**

Same as in 1918, with the following changes :—

(1) Under Samskrit, Second Paper, delete the words :—“(First two Tantras only)” after “Pancha-  
tantra (expurgated).”

(2) Under Samskrit, Third Paper, delete the words—“(to the end of पुनर्दि)”

1920.

**ADMISSION EXAMINATION.**

- (a) FOR CANDIDATES FROM THE CENTRAL HINDU SCHOOL, BENARES.

(Same as the Matriculation of the Allahabad University for 1919.)

- (b) FOR PRIVATE CANDIDATES.

Same as the B. H. U. courses for 1919, with the following changes :—

- I. Under "Sanskrit," delete : "Chanakyaniti (expurgated)."
- II. Under Marathi, for "Damle's Marathi Grammar," substitute,— "Proudhobodha Vyakarana, by R. B. Joshi."
- III. Under "Indian Vernaculars," add "Parbatia" as one of the vernaculars, with the following as text-books :

(1) *Bhanubhaktia Ramayana* (Poetry). Bâlakânda Ayodhya Kânda, Aranya Kânda and Kiskindha Kânda.

(2) *Sankshipta Bharata* (Prose) : Adi, Bana, Virata and Udyoga Parvas.

(3) *Gurkha Vyakaranabodha*.

- IV. Under "Drawing and Manual Training" delete the words "courses not prescribed" and substitute "syllabus laid down for the School Leaving Certificate Examination of the United Provinces for the year."

**INTERMEDIATE EXAMINATION.**

- (a) SUPPLEMENTARY EXAMINATION FOR CANDIDATES WHO FAILED IN 1919.

(Same as the Allahabad University course for 1919.)

- (b) FOR OTHER CANDIDATES :—

### English.

There will be two papers in text-books, *one* in poetry and *the other* in prose, each of three hours' duration. There will be two OTHER papers, also of the duration of three hours each, *one* containing exercises in General Composition, including an Essay, and *the other* of subjects' for essay-writing bearing on books for non-detailed study. The books of Poetry prescribed for the course will ordinarily include a play of Shakespeare, but questions in it will be limited to the interpretation of text and to an appreciation of the story. The books prescribed for general study will, as far as possible, be representative of different kinds of Prose Composition. There will also be a *viva voce* examination, which will be limited to a test of the candidate's capacity to use the English language.

N. B.—Alternative questions will be set, at least to the extent of half the number of questions, in each paper.

#### 1. Poetry -

SHAKESPEARE: Merchant of Venice.

TENNYSON: Mort D' Arthur.

GOLDSMITH: The Traveller and the Deserted Village.

#### 2. Prose—

Coverley Papers, edited by Myers (Oxford University Press).

BOSWELL: Life of Johnson (Blackie's English Texts).

FROUDE: Short Studies on Great Subjects (Longmans' Class Books).

#### 3. Non-detailed study—

PAYNE: Annals of Mewar (abridged from Tod-Routledge).

SCOTT: Ivanhoe.

GRIERSON : Scott (Peeps at Great Men. A. & C Black).

FOWLER : British Orators (Macmillan).

### Composition in a Modern Indian Language.

There will be ONE paper on Composition, in a Modern Indian Language, of three hours' duration.

It will be partly general and partly based on the prescribed books.

The following books are recommended for general study as presenting models of composition and style.

#### (a) Hindi

1. *Anyokti Kalpadruma* (अन्योक्ति कल्पद्रुम), by Din Dayal Giri.

2. *Ranadhir Prem Mohini* (रणधीर प्रेममोहिनी), by Sri Nivas Das.

3. *Mahabharata* (महाभारत), by M. P. Dwivedi.

#### (b) Urdu.

1. *Yâdgâr-i-Ghâlib*, by Khwaja Altaf Husain Hali (Mohammedan College Book-Depôt, Aligarh), to the end of Chapter on نثر اردو پر دیور اور اسکا انتخاب, and excluding the Chapters dealing with Ghalib's Persian writings.

2. *Majmua-i-Nazm-i-Azad*, by Maulvi Mohammad Husain Azad (Azad Book-Depôt, Lahore).

3. *Ibn-ul-Waqt*, by Maulvi Nazir Ahmad (Nazir Husain & Sons, Dariba Kalan, Delhi).

#### (c) Parbatia.

1. *Shakuntalopākhyana*.

2. *Bidulaputra Samvada*.

3. *Sankshipta Bharata*—Parvas other than Adi. Bana, Virata and Udyoga.

4. *Bhanubhaktiya Ramayana*, Yuddha Kanda.

(d) *Bengali.*

1. *Banger Ratnamala* (বঙ্গের রত্নমালা), by Kali Krishna Bhattacharya.
2. *Charita Kathā* (চরিত কথা), by Ramendra Sunder Trivedi.
3. *Prachya-o-Pashchatya* (প্রাচ্য ও পশ্চাত্য), by Swami Vivekananda.
4. *Parichaya* (পরিচয়), by Rabindranath Tagore.

(e) *Gujarati.*

*Hāsya Mandir*, by Ramanbhai & Mrs. Vidya Ramanbhai.

*Narmad Jivan*, by Navalram.

*Hridaya Vina*, by Narsinga Rao B. Divatia.

*Parakramani Prasadi*, by K. H. Dhruva.

(f) *Marathi.*

AGARKAR : *Vividhalekhasamgraha*.

KHARE : *Nānāmchā Adhikāra-Yoga*.

*Dravida Mahabharatamrita*.

(g) *Tamil.*

1. Elements of Civics for India, in Tamil, by Mr. T. S. Subramania Iyer, M. A., L. T.
2. *Pratapa Modalier Charitam*, by the late Mr. Veda-ayagam Pillai.
3. *Kambanadar*, by Mr. T. Chelvakeshavaray Mudaliar, M. A.

(h) *Telugu.*

*Rajasimha*, by Venkataparyvatisa Kavalu.

*Sudhasaratchandranu*, by C. L. Narasimham.

*Chandragupta*, by Vidyānanda Paramahansa.

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**Sanskrit.**

There will be THREE papers, each of three hours' duration. The *first* paper will be on the prescribed

books of prose, the *second* on the prescribed books of poetry, and the *third* on (a) grammar and (b) translation.

**Paper 1.—Prose :**

(1) Aitarêya Brâhmaṇa : Panchika VIII, Adhyâya, 4 kândas 7-9 (Bib. Indi. Edition, pp. 257-273).

(2) Taittirîyôpaniṣad : 'Sikṣa Adhyâya ; Anuvâka 11 (Anandasrama Edition, pp. 31-35).

(3) Taittirîya Âranyaka : Prapaṭhaka II ; Anuvaka 3 (Bib. Samskrit Edition, pp. 192-200).

(4) Dasakumâracharita ; Chapter VI ; Gomani Charita (Nirnaya Sagara Edition, pp. 218-225).

(5) Harsacharita : Chapter VIII (Nirnaya Sagara Press pp. 240-245).

(6) Jâtakamâlâ : Unmadayanti Jâataka (Harvard Oriental Series).

(7) Upamitibhavaprapaṇcha Katha (Bib. Indi. Edition), pp. 198, "Samsârijiva" to 214 "Vihasyati."

**Paper II.—Poetry :**

Raghuvamśa—Cantos I and II.

\* Bhartrhari—Nitiṣataka.

**Paper III—(a) Grammar—**Declension, Conjugation, Syntax, Compounds and Derivatives (*Kṛt* and *Taddhita*).

(b) *Translation* from English into Samskrit.

N. B. Samskrit shall be written in the Devanagari script.

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**Another Classical Language.**

There will be THREE papers, each of three hours' duration. The *first* paper will be on the prescribed books of prose and poetry, and will contain questions on Grammar and Prosody also, while the *second* will consist of passages of *Unseen Prose* for translation

from the Classical Language into English or Urdu or Hindi, and the *third* paper will consist of two pieces of English, Urdu or Hindi prose for translation into the Classical Language, one in simple language and the other slightly more difficult.

**(A) Arabic.**

Selections in Arabic Prose and Verse (Published in 1911, Anwar Ahmadi Press, Allahabad).

*Book recommended for supplementary reading:—*

(Qalyubi, Nawadir Hikayat, 1-150.

*Grammar recommended:*

Nabadi-ul-Arabiya, by Shartuni III (P. 1-96 Sarf)

**(B) Persian.**

Anwâr-i-Suhaili.

Ruba'iyat of Umar-i-Khayyâm.

Ruqa'at-i-Alamgiri.

Hafiz (to end of radif of ج).

*For supplementary reading.*

Shah's Diary (whole).

**A Modern European Language (French,  
German, Italian).**

(Courses not prescribed.)

**Mathematics.**

There will be THREE papers in Mathematics, each of three hours' duration, *one* paper in Algebra and Trigonometry, the *second* in the Geometry of Conics and Solids and the Elements of Co-ordinate Geometry, and the *third* in Elementary Mechanics.

The courses shall be as follows:—

(1) *Algebra*.—Quadratic equations involving two or more unknown quantities. The Theory of quadratic equations and of expressions of the second degree. Imaginary Expressions. Arithmetical, Geometrical, and Harmonical Progressions. Permutations and Combinations. Binomial and Exponential Theorems. Logarithmic Series and Elementary Determinants.



(2) *Plane Trigonometry*.—Including Solution of Triangles, and simple problems of inscribed, circumscribed and described circles. Logarithms, Graphical representation of the circular functions. Inverse circular functions.

(3) *Geometry of Conic Sections*.—The properties of the Parabola, Ellipse and Hyperbola treated geometrically.

(4) *Geometry of Solids*.—As in Hall and Stevens, Part VI. The use of Trigonometry and Logarithms shall be permitted in solving numerical examples.

(5) *Co-ordinate Geometry*.—The properties of the straight line and circle treated by rectangular and polar co-ordinates and the simplest equations of the Parabola, Ellipse and Hyperbola.

(6) *Elementary Mechanics*.—As in Loney's *Mechanics for Beginners*.

The following books are suggested :—

1. Algebra, Part II, by K. P. Basu.
2. Trigonometry, Part I, by Loney.
3. Geometrical Conics, by Ashutosh Mukherji.
4. Co-ordinate Geometry, by C. Smith.
5. Elementary Mensuration, by Stevens.

### History.

There will be two papers in History: *one* on the Histories of Greece and Rome, and the *other* on the History of India. Each paper will be of three hours' duration.

*Paper I.*—

C. D. EDMONDS: Greek History for Schools.

CREIGHTON: Rome (Primer).

*Paper II.*—

PROTHERO AND S. C. VIDYABHUSAN: History of India up to the end of the reign of Queen Victoria.

## Logic.

There will be two papers, each of three hours' duration.

Paper I.—Elements of Deductive Logic.

Paper II.—Elements of Inductive Logic.

*N. B.*—25 per cent of the total marks in each paper shall be reserved for Indian Logic.

The subject of Logic is to be studied as defined in the following syllabus :—

### DEDUCTIVE LOGIC.

1. The Problem of Logic. Its definition and scope. Relation of Logic to Psychology, to the Natural Sciences and to Philosophy. Logic as Science and Art. Logic as Material and Formal.

2. Thought—its essential nature and its forms. Laws of Thought as Psychological and Logical.

Thought and Language. Relation of Logic to Grammar. Judgment and Proposition. The parts of a Proposition.

3. Concept—its relation to Judgment. Concept and Name. Name and Term—their relation. Kinds of Terms. Nomenclature of Predicables. Definition and Division as logical processes.

4. Propositions and their classification. Distribution of Terms in a proposition. Opposition of propositions. Immediate Inferences.

5. Mediate Inferences and their varieties. Syllogism—its nature and its constituent parts. Rules of Syllogism. Figure and Mood. Determination of valid Moods and their different methods. Reduction—its Methods and Use. Abbreviated and Irregular forms of Syllogism. Trains of Reasoning. Hypothetical and Disjunctive arguments and their varieties.

6. Fallacies and their classification. The nature of each fallacy.

### INDUCTIVE LOGIC.

1. The problem of Induction. The Inductive process and its different forms. Assumptions of Induction. Laws of Causality and Uniformity of Nature.

2. Preliminaries of Induction. Observation and Experiment. Methods of Induction.

3. Scientific and Imperfect Inductions. Induction by Enumeration, and the use of Statistics. Induction by Analogy—its nature and value.

4 Hypothesis—its formation and use. Conditions of legitimate hypothesis. Explanation. Deduction and Induction, and their connection.

5. Fallacies. Varieties of Inductive Fallacies, and the nature of each variety.

### ELEMENTS OF INDIAN LOGIC.

1. बुद्धिः and ज्ञानम् ; ज्ञानम् as स्मृतिः and अनुभवः—the nature of each.

2. ज्ञानम् as अनुभवः—its two varieties, as यथार्थः and अयथार्थः ; the varieties of यथार्थज्ञानम् and the करणम् of each variety ; करणम् and कारणम्—their relation ; the nature and kinds of कारणम्.

3. ज्ञानम् as प्रत्यक्षम्—its nature and varieties ; the sources of प्रत्यक्षम्.

4. ज्ञानम् as अनुमितिः—its nature and varieties ; the processes involved in each kind of अनुमितिः ; हेत्वाभासः—its nature and varieties.

5. ज्ञानम् as उपमानम्—its nature and relation to analogy.

6. ज्ञानम् as शब्दम्—its nature ; the function of शब्दः in ज्ञानम् ; the sources and varieties of शब्दज्ञानम्.

7. ज्ञानम् as अयथार्थम्—its varieties ; the nature of each variety.

*Books recommended for studies in connection with the above syllabus :—*

1. CREIGHTON'S Introductory Logic (omitting Part III)

or

2. WELTON'S Intermediate Logic,

and

3. *Tarkasamgraha* of Annambhatta.

N. B.—Questions in Indian Logic are to be distributed between the two papers, in accordance with the subject-matter of each.

*Books that may be consulted :—*

STOUT : Groundwork of Logic.

JEVONS : Elementary Lessons in Logic.

MINTO : Logic.

CARVETH READ : Logic—Deductive and Inductive.

FOWLER : Inductive Logic.

JEVONS : Studies in Deductive Logic.

*Trakabhasa* by Kesava Misra.

*Bhashaparichheda*.

*Note.*—The books recommended for study are not meant to be used as prescribed text-books, but as indicating the general scope of studies in the subjects to which they relate. In Indian Philosophy, however, the questions should be confined, as far as possible, to the books recommended.

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**Drawing and Manual Training.**

*(Courses not prescribed).*

## Elementary Economics and Indian Administration.

(Students are expected to show some knowledge of Economic Geography).

### TEXT-BOOKS RECOMMENDED.

MORELAND : Introduction to Economics for Indian Students.

PENSON : Economics of Everyday Life,

ANDERSON : The Indian Constitution.

### BOOKS FOR CONSULTATION :—

Imperial Gazetteer, Vols. III and IV.

## Biology.

There will be two papers, *one* in Botany and *another* in Zoology, each of three hours' duration. There will *also* be *practical test* in both branches.

### (A) *Botany*.

*Histology*.—Plant cell. The cell-wall and its modifications. Living and non-living contents of the cell. Microchemical tests for the wall and the contents. The distinction between animals and plants. An elementary knowledge of the plant tissues and tissue system. The general structure of the various organs of an angiosperm and the mode of growth.

*External Morphology*.—The same as for Admission Examination; but a higher standard would be expected.

*Systematic*.—(a) The characteristics of the following natural orders :

Ranunculaceæ, Papaveraceæ, Cruciferae, Malvaceæ, Rutaceæ, Leguminosæ, Labiatae, Compositae, Liliaceæ.

(b) The structure (microscopic and macroscopic) and life history of—

(i) *Bacillus Subtilis*, (ii) *Saccharomyces*, (iii) *Mucor*, (iv) *Spirogyra*, (v) a Moss, (vi) a Fern.

An outline of the classification of the vegetable kingdom to illustrate the gradual increase of complexity of structure and method of re-production.

*Physiology.*—The stability of plant body. The usual constituents of plant food. Assimilation, transpiration, respiration. An elementary knowledge of the reaction of plants to environments.

#### PRACTICAL WORK.

Candidates will be required to examine microscopically, to dissect and to describe specimens of plants included in the above syllabus.

They are also expected to keep a record of all practical work in the Laboratory in a note-book, which will be liable to examination by the University Examiners.

The following books are suggested :—

J. M. LOWSON : 'A Text-book of Botany' (Indian Edition).

D. THODAY : Botany, 'A Text-book for Senior Students' (Cambridge University Press).

SCOTT : *Structive Botany*, 2 Volumes.

BHATIA AND K. NARAIN'S 'Laboratory Note-book of Botany' (Lahore).

#### (B) *Zoology.*

Definition and scope of Zoology. Nature of Protoplasm. The Structure and Life-history of *Amoeba*. Structure of the Cell : Cell-division ; Conjugation and Fertilisation. Elements of Development. Structure and Functions of the Animal Tissues. The Structure and Life-history of *Hydra*, *Pheretima* or *Eutyphæus*, and Cockroach.

### The Anatomy and Osteology of the Frog and the Rabbit

The Elementary Physiology of the various Organs, as illustrated by the Frog and the Rabbit.

The outlines of the development and larval history of the Frog.

A general classification of the Animal Kingdom, with the characteristics of the principal phyla.

### PRACTICAL WORK.

The candidates will be required to examine microscopically, to dissect and to describe the animals named in the syllabus. They are also expected to keep a record of all practical work done in the Laboratory in a note-book, which will be liable to examination by the University Examiners.

The following books are suggested :--

BARRADAILE: Manual of Zoology (Oxford Med. Pub.)

MARSHALL: Frog.

MARSHALL AND HURST: Practical Zoology.

PARKER: Practical Zoology (MacMillan).

G. C. BOURNE: Comparative Anatomy of Animals, in 2 Vols. (G. Bell & Sons).

### Physics.

There will be two papers, each of three hours' duration. There will also be a *practical* examination.

1st Paper—Elementary Experimental Mechanics, Hydrostatics, Heat and Sound.

2nd Paper—Light, Electricity and Magnetism.

The following syllabus is prescribed :—

### EXPERIMENTAL MECHANICS.

Matter, Inertia and Force. Fundamental notions of Velocity and Acceleration. Composition of Velocities and Accelerations. Triangle of Forces. Laws

of Motion. Units of Force, Mass and Weight. Unit of Time. Work. Potential and Kinetic Energy. Conservation of Energy. Laws of Universal Gravitation. Atwood's Machine. Moments. Parallel Forces. Couples. Centre of Gravity. Balance. Friction. Simple Machines. Simple Experiments on Projectiles. Simple Pendulum. Simple Harmonic Motion.

#### HYDROSTATICS.

Fluid Pressures. Pressure in Liquids. Relative Density of Liquids by Balancing Columns. Principle of Archimedes. Density. Specific Gravity. Principle of Floating Bodies. Hydrometers.

Atmospheric Pressure. Barometer. Manometer. Density of Air. Boyle's Law.

Simple Water and Air-pumps. Hydraulic Press. Syphon. Diving Bell.

(All the above in Mechanics and Hydrostatics should be studied from an *experimental* point of view, mathematical problems and their calculations being excluded).

#### HEAT.

Temperature and Thermometers. Co-efficients of Expansion. Expansion of Solids, Liquids and Gases. Vapour Pressures. Hygrometry. Calorimetry. Calorimeters and their water-equivalents. Capacity of Heat and Specific Heat. Latent Heat. Conduction, Convection and Radiation. Reflection and Absorption of Radiant Heat. Relation of Heat and Work. Mechanical Equivalent. Joule's Experiment.

Boyle's Law,  $p_v = RT$ . Isothermal and Adiabatic curves. Applications of their equations in  $p$ ,  $v$ , co-ordinates. Definitions of Specific Heat at constant volume and at constant pressure. Definitions of Isothermal and Adiabatic Elasticities of a Gas.



## LIGHT.

Rectilinear Propagation of Light. Laws of Reflection and Refraction of Light. Fizeau's and Foucault's methods of determining the Velocity of Light. Photometry. Mirrors and Lenses. Dispersion of Light by Prisms. Spectrometer. Pure Spectrum and Fraunhofer's Lines. Simple Optical Instruments, *e. g.*, Telescopes, Microscopes, Sextants, Cameras, Optical Lanterns. Simple experiments to illustrate defects of vision and their remedies.

## SOUND.

The Propagation and Velocity of Propagation of Sound in Air. Nature of Sound Waves. Wave-length, Frequency and Amplitude. Reflection, Refraction and Interference of Sound Waves. Applications of the formula  $V = \sqrt{D}$ . Vibration of strings and determination of frequency by means of the formula  $N = \frac{1}{2l} \sqrt{\frac{T}{M}}$ . Nodal points in open and closed pipes. Diatonic Scale and Musical Intervals. Sensitive Flames. Manometric Flames, as seen in a revolving mirror. The use of Resonators. Explanation of Beats. Harmonics.

## ELECTRICITY AND MAGNETISM.

Frictional Electricity. Methods of Production. Conductors and Non-conductors. Induction. Electroscopes. Charging an Electroscope by Conduction and Induction. Electrophorus. Condensers. Capacity of Condensers. Unit of Charge and Potential. Voss's Influence Machine.

Simple Magnet. Definition of Unit Magnetic Pole. Terrestrial Magnetism. Dip. Declination. Magnetic Moment. Lines of Force. Magnetometer.

Voltaic Cell. Electric Current and its magnetic effects. Daniell, Bunsen, Leclanche and Bichromate Batteries. Simple Astatic and Tangent Galvanometers. Electrolysis. Voltmeter. Definitions of Unit

Quantity of Electricity, Unit Difference of Potential, Electromotive Force and Resistance. Ohm's Law. Wheatstone's Bridge and Post-Office Box. Heating effect of Current. Joule's Law. Electro-magnets. Induction Coil. Simple Dynamo. Electric Lamps and Arcs. Electric Bells. Principles of Telegraphy. Definitions of Practical Units and their relation to Absolute Units. Thermopile.

The following books are suggested :—

BROWN : Experimental Science I, Physics (Camb. Univ. Press).

GLAZEBROOK : Heat and Light.

DE, R. K. : Sound.

ASHFORD, C. E. : Electricity and Magnetism (Arnold).

S. P. THOMSON : Electricity and Magnetism. (Such portions as are required by the Syllabus.)

WILLOWS, R. S. : Text-book of Physics.

POYSER, A. W. : Electricity and Magnetism.

There shall also be an examination in Practical work. The laboratory course is indicated by the subjoined list of experiments. An account of each experiment must be written by the student in a special note-book, which will be examined. The account of each experiment should be signed by the Demonstrator, and the note-books should be kept in his charge.

#### *List of Experiments.*

1. Measurement of Length.
2. Vernier.
3. Callipers.
4. Screw-guage.
5. Thickness of a glass-plate by a Spherometer.
6. Measurements of Areas and Volumes.

7. Balance. Determination of Mass.
8. Determination of Specific Gravities by Hydrostatic Balance.
9. Nicholson's Hydrometer.
10. Densities of Liquids by U-tube and Hare's apparatus.
11. Barometer and Boyle's Law.
12. Simple Pendulum. Variation of periodic time with length.
13. Applications of Triangle of Forces.
14. Equilibrium of Parallel Forces.
15. Principle of Moments.
16. Determination of Co-efficient of Friction.
17. Testing Fixed Points of Thermometers.
18. Determination of Specific Heats.
19. Determination of Latent Heats.
20. Construction of a Graph, illustrating the rate of cooling of a liquid.
21. Comparison of expansion of water over different ranges of temperature.
22. Determination of Boiling Points.
23. Reflection and Refraction of Light at Plane and Spherical Surfaces.
24. Determination of Refractive Indices.
25. Focal Lengths of Concave Mirrors and Convex Lenses.
26. Production of pure Spectrum by a Slit, Prism and Lenses.
27. Determination of Velocity of Sound by Resonance Tube.
28. Mapping out lines of force by a small magnet, and determination of neutral points in a magnetic field.

29. Comparison of Magnetic moments by Magnetometer.

30. Experiments with Electroscope.

31. Variation of magnetic force at the centre of a coil with radius, number of turns and strength of current.

32. Reduction Factor of a Tangent Galvanometer.

33. Determination of Resistance by the use of Wheatstone's Wire-bridge.

The following text-books are recommended for Practical Work :—

DE, R. K.: Intermediate Course of Practical Physics.

BROWN.: Experimental Science I, Physics. (Camb. Univ. Press).

HADLEY, H. E.: Manual of Practical Physics.

### Chemistry.

There will be two papers, each of three hours' duration. There will also be a *practical* examination.

The following course has been prescribed, in addition to what has been indicated for the Admission Examination :—

Chemical action. Mechanical mixture and compounds. Laws of chemical combination by weight and by volume. Laws of Charles and Boyle. Density of gases. Vapour pressure. Graham's Law of Diffusion. Atomic theory and Avogadro's hypothesis, atoms, molecules, atomic and molecular weights determination. Dulong and Petit's Law. Chemical symbols, formulæ, equations. Valency, equivalent weights and their determinations. Elementary ideas of the kinetic theory of gases, of the law of mass action, ionic theory (in solutions) and dissociation (gaseous). Calculations of an easy nature.

**FLAME**, Bunsen burner, blowpipe flame, ignition temperature. Davy's Safety Lamp, oxidation, reduction. Periodic classification (treated with reference to the elements prescribed below).

Study of the following elements and compounds:--

**HYDROGEN**, oxygen, ozone, water, hydrogen-peroxide, oxides (acidic, basic, neutral). Peroxides bases, acids, neutralisation.

**NITROGEN**, its oxides, ammonia, nitric and nitrous acids, nitrates and nitrites, action of heat on nitrates, atmosphere.

**CHLORINE**, its monoxide and peroxide, hydrochloric, hypochlorous, chloric acids, and their salts, perchlorates.

**BROMINE**, hydrobromic, hypobromous, and bromic acids, and their salts.

**IODINE**, hydriodic and iodic acids, iodates, iodides, iodine pentoxide.

**FLUORINE**, hydrofluoric acids and fluorides.

**SULPHUR**, its allotropic modification. sulphuretted hydrogen, sulphur di- and tri- oxides. Liquifaction of sulphur dioxide, sulphurous and sulphuric acids, sulphides, sulphites, sulphates, manufacture of sulphuric acid—chamber process, contact process.

**CARBON**, its allotropic modifications, oxides of carbon, coal gas, methane, ethylene and acetylene.

**PHOSPHORUS**, its allotropic modifications, phosphoretted hydrogen, tri- and penta- oxides, orthophosphoric acid and the phosphates of the alkali and the alkaline earths, tri- and penta-chloride of phosphorus.

**SILICON**, silica, silicic acid and the silicates. Silicon fluoride, dialysis, glass and porcelain.

**POTASSIUM** and sodium, their oxides, hydroxides, chlorides, sulphates, carbonates, nitrates, chlorates and perchlorates.

**AMMONIUM** salts, chloride, sulphate, nitrate and carbonate.

**CALCIUM**, barium, strontium, their oxides and hydroxides, chlorides, sulphates, nitrates, carbonates, bleaching powder and calcium carbide.

**MAGNESIUM**, zinc and mercury, their oxides, chlorides and sulphates, sulphides of zinc and mercury, mercury nitrates.

**ARSENIC**, antimony and bismuth, their oxides, chlorides and sulphides, bismuth nitrate and the hydrides of antimony and arsenic.

**ALUMINIUM**, its oxides, hydroxide, sulphate and chloride, alum. Boron, boric acid, borax.

**COPPER**, its oxides, chlorides, sulphate, sulphides and nitrate, brass, bronze.

**SILVER**, its nitrate, chloride, bromide, iodide.

**TIN**, its oxides, chlorides, sulphides.

**LEAD**, its chloride, iodide, sulphate, nitrate, acetate, carbonate.

**IRON**, its oxides, sulphates, chlorides, sulphides; cast iron, wrought iron, steel.

**COBALT**, nickel, manganese, chromium, cadmium, general information of their compounds, so far as needed for the qualitative analysis of a simple salt.

The metallurgical extraction of the following metals :—

Iron, copper, zinc, mercury, lead, aluminium, tin, magnesium, sodium.

Determination of the composition and the molecular formula of the more important compounds in the Syllabus, for example :—

Water, ozone, ammonia, hydrochloric acid, methane, sulphur dioxide, etc.

## PRACTICAL WORK.

Candidates are expected to perform the following experiments in the Laboratory :—

1. Preparation of the following gases and the fitting up of the apparatus needed for the same, including *glass bending, joining two straight glass tubings and simple glass blowing* :—

Hydrogen, oxygen, chlorine, nitrous oxide, sulphur dioxide, nitrogen and carbon monoxide.

2. Qualitative analysis by dry and wet methods of a simple salt included in the Syllabus.

3. Volumetric analysis. Preparation of standard solutions of acids and alkalis, and simple estimation of acids and alkalies in their solutions.

4. Determination of equivalent weights of magnesium, zinc and copper.

5. Determination of the loss in weight on heating of magnesite and gypsum.

6. Preparation of simple salts, for example :—

Barium Nitrate from Barium Chloride.

Barium Chloride from Barium Sulphate.

Copper Sulphate from Copper and Copper Oxide.

Zinc Sulphate from Zinc.

Lead Nitrate from Lead Oxide, etc.

Quantities of the material and the yield to be measured.

Attention is directed to the importance of candidates keeping complete records of their practical work. When presenting themselves for examination, they are required to submit note-books containing records of the practical work performed during the last two years of training for inspection by the examiners, who will take them into account in deciding the Examination. *Candidates will be*

*allowed to use their own note-books at the time of the practical examination.* These note-books will only contain the account of the actual work performed by the candidates.

Books recommended :—

ROSCOE AND LUNT: Inorganic Chemistry for Beginners.

ROSE AND HARDEN: Inorganic Chemistry for Advanced Students.

HOLLEMAN AND COOPER: Text-book of Inorganic Chemistry.

F. JONES: A Junior Course of Practical Chemistry.

BRUCE AND HARPER: Practical Chemistry.

P. C. ROY: Practical Inorganic Chemistry.

An additional course in Chemistry, fully covering the requirements of the Preliminary Scientific Examination of the Medical Degree of the Allahabad University, will be provided, and it will be optional for candidates appearing for the Intermediate Examination to take this course, in addition to the ordinary course.

The Syllabus prescribed by the Allahabad University for the Preliminary Scientific Examination will be adopted for this additional optional course in Chemistry. (*Vide* Resolution No. 14 of the Senate, passed on the 30th March, 1918).

### Geology.

(Courses not prescribed.)

## B.A. EXAMINATION.

(A) SUPPLEMENTARY EXAMINATION FOR THOSE  
CANDIDATES WHO FAILED IN 1919.

(Same as the Allahabad University B. A. course for 1919).



(B.) ORDINARY EXAMINATION FOR OTHER  
CANDIDATES.

**English.**

*Ordinary Course.*

There will be FOUR papers in all, each of three hours' duration, *two* in text-books, poetry and prose, respectively, and *two* in essay-writing, one general and the other relating to books prescribed for general study. The books prescribed in poetry will ordinarily include one of the more difficult plays of Shakespeare, and some selections from Milton. The books for non-detailed study will, as far as possible, be representative of narrative, descriptive, expository and persuasive composition. There will also be a *viva voce* examination, which will be limited to a test of the student's capacity to use the English language.

N. B.—Alternative questions will be set, at least to the extent of half the number of the questions, in each paper.

**1. Poetry.—**

SHAKESPEARE: Hamlet and Henry V.

MILTON: Paradise Lost, Books I and II.

SHELLEY: Adonais, The Skylark, The Sensitive Plant.

**2. Prose.—**

RUSKIN: Sesame and Lilies.

Nineteenth Century Essays, edited by Sampson (Cambridge University Press).

Essays on Addison, edited by Hadow (Oxford University Press).

**3. Non-detailed study—**

BURKE: Conciliation with America. (Macmillan & Co.).

MARVIN: The Living Past (Oxford University Press).

**NIVEDITA :** Footfalls of Indian History (Longmans).

**NEWMAN :** Idea of a University.

### HONOURS COURSE.

In addition to the papers of the Ordinary Course, there will be a SPECIAL paper of three hours.

One of the following groups of books, in addition to those prescribed for the Ordinary Course, will form the subject of the examination :

1. **SIDNEY LEE :** Shakespeare.

**RALEIGH :** Shakespeare (English Men of Letters Series).

**JOHNSON** on Shakespeare (Oxford University Press).

or

2. **RALEIGH :** Milton.

**Pattison :** Milton (English Men of Letters Series).

**ADDISON :** Paradise Lost.

**MACAULAY :** Milton.

or

3. **SYMONDS :** Shelley.

**SHELLEY'S** Defence of Poetry and **BROWNING'S** Essay on Shelley (Heath & Co.)

**BRANDES :** Naturalism in England (with special reference to Byron, Shelley and Keats).

or

4. **COURTHOPE :** Addison (English Men of Letters Series).

**JOHNSON :** Addison (Lives of Poets).

**LESLIE STEPHEN :** Literature and Society in the Eighteenth Century.

**FREDERIC HARRISON :** Ruskin (English Men of Letters Series).

**Sanskrit.****Ordinary Course.**

There will be THREE papers, each of three hours' duration.

**Paper I.—**

- (a) Uttaracharita.
- (b) Taittiriya Aranyaka : Praphaṭhaka X ; Anuvaka I.
- (c) Satapatha Brâhmaṇa : Kāṇḍa I, Adhyâya 1 ; Brâhmaṇa 1 (Bib. Ind. Edition, pp. 5-10).
- (d) Satapatha Brâhmaṇa : Kāṇḍa I, Adhyâya 8 ; Brâhmaṇa 1 (Bib. Ind. Edition, pp. 524-534).
- (e) Kathôpaniṣad, Valli 1.
- (f) Kâdambari---Kathamukhaprakaraṇa.

**Paper II.—**

- (a) Meghadûta.
- (b) Vikramâṅkacharita (I and II).
- (c) Vâmana's Kavyâlamkāra-Sûtra.

**Paper III.—**

- (a) Grammar.
  - (b) Translation --from English into Sanskrit.
- Questions on the History of Sanskrit Kāvya Literature shall be distributed over all the papers.

*Sanskrit shall be written in the Devanagari script.*

**HONOURS COURSE.**

In addition to the papers of Ordinary Course, there will be A FURTHER paper of two hours' duration on Laghu Kaumudī, and also a *viva voce* test, based on Gaudapâdabhâṣya and Tarkâbhâṣa.

## Composition in a Modern Indian Language.

There will be ONE paper on Composition in the Modern Indian Language, of three hours' duration. It will be partly general and partly based on the prescribed books.

The following books are recommended for general study as presenting models of composition and style :—

### (a) *Hindi.*

1. *Bhrâmaragîta*, by Sur Das.
2. *Gadya-kāvya-mîmâmsa*, by Ambika Datta Vyas (Kashi Nagari Pracharini Sabha edition).
3. *Mudrâ Rakṣas*, by Bhâratendu Harish Chandra.
4. *Nibandha Mâlâdarṣa* (Revised). by Pandit Ganga Prasad.

### (b) *Urdu.*

1. *Ab-i-Hayât*, by Moulvi Mohammad Husain (Azad Book Depôt, Lahore).
2. *Waqâ-i-Sair-o-Siyâhat* Doctor Brenier, by Khalifa Mohammad Husain (Mohammedan College Book Depôt, Aligarh).
3. *Darbâr-i-Akbari*, by Moulvi Mohammad Husain Azad (Azad Book Depôt, Lahore). The following chapters only :—

	Pages.
Akbar ... ..	1-156
Bairam Khan Khankhanan ...	157-196
Mahesh Das Raja Birbar ...	295-310
Abulfaiz Faizi Fayyazi ...	359-384
Sheikh Abul Fazal ...	463-508
Raja Todar Mal ...	519-534
Raja Man Singh ...	535-566
Mirza Abdurrahim Khankhanan ...	576-616

**(c) Bengali.**

1. *Prabhâta-Chinta*, by Kali Prasanna Ghosh.
2. *Bâlmikir Jaya*, by Hara Prasad Shastri.
3. *Bindur Chhele*, by Sarat Chandra Chatterji.
4. *Âdhunika Sâhitya*, by Rabindranath Tagore.

**(d) Marathi.**

1. V. K. Chiplunkar: *Nibandhamâla*.
2. M. G. RANADE: *Dharmapara Vyâkhyânam*.

**(e) Gujarati.**

1. *Apano Dharma*, by A. B. Dhruva.
2. *Uttara Rama Charita*, by Manilal N. Dhruva.
3. *Sâthina Sâhityânu Digdarsana*, by D. P. Derasari.
4. *Melani Mudra*, by K. H. Dhruva.

**(f) Tamil.**

(i) *Periyapurana Vacanam*, by Mr. Arumuganavalar. Lives of Saints Tirunavukkarasunayanar, Perumiyhalai Kurumba Nayanar; Karikhalammayar, Appoothiadikal Nayanar, Tirunaelakka Nayanar, Naminandiadikal Nayanar, Tirugnana Sambanda Moorthy Nayanar, pp. 92.

(ii) *Battar Vaibhavam*, by the late Mr. Sadagopa Ramanujachariar.

(iii) *Padmini*, by Mr. V. Muthuswami Iyer, M. A., L. T.

(iv) *Manimekalai*, in prose, by Mr. V. Swaminatha Iyer.

**(g) Telugu.**

*Andhra Dasakumaracharitra*, by V. Venkataroya Sastri.

*Ananda Mutt*, by Dorasamiawth (V. Ramaswami Sastri & Sons.)

*Kavithathva Vicharamu*, by C R. Reddi, M. A.

**Any other Classical Language : Arabic  
and Persian.**

ORDINARY COURSE.

There will be THREE papers, each of three hours' duration (i) on the text-books, grammar, rhetoric and prosody, (ii) unseen translation from prose and verse, and (iii) translation from prose into the classical language.

The following text-books are prescribed : —

**(a) Arabic.**

ORDINARY COURSE.

*Al-Fakhri.*

*Makamat of Badi'l.*

*Saba Mu'allaqat.*

*Diwan of Hamasa (first Bab only)*

HONOURS COURSE.

In addition to the papers of the Ordinary Course, there will be a SPECIAL paper of three hours.

*Maqamat of Hariri (first half).*

*Nafhat-ul-Yaman.*

*Timurnamâ.*

*Saba Mu'allaqat*

*Quran (first three siparas).*

**(b) Persian.**

ORDINARY COURSE.

*Siyâsatnâma.*

*Diwan of Hafiz (from radîf of ۛ to the end).*

*Akhlâq-i-Muhasini.*

*Naldaman of Faizi.*

Recommended for rapid reading : —

*Khezana-i-Amirâ.*

## HONOURS COURSE.

In addition to the papers of the Ordinary Course, there will be a SPECIAL paper of three hours.

*Diwân* of Qaani.

*Diwan* of Shaibani.

*Kulliyât* of Sa'di.

*Sikandarnâma* of Nizami.

*Shâhnâma* of Firdausi (first half).

## A Modern European Language.

(Course not prescribed.)

## Philosophy.

## ORDINARY COURSE.

There will be THREE papers, each of three hours' duration.

## PAPER I—

Psychology.

*Books recommended for study:—*

(1) STOUT'S Groundwork in Psychology (*Fifth Impression*).

(2) ANGELL'S Psychology (*Fourth Edition*).

N.B.—Students will be required to show acquaintance with the Physiology of the Nervous System and of the Sense Organs, so far as necessary, in connexion with the study of Psychology, for which the following books are suggested for study:—

HUXLEY: Elementary Lessons in Physiology—latest edition. (Nervous System and Sense Organs).

MCDUGALL: Physiological Psychology.

*Books that may be consulted:—*

LECKLEY: Nervous System.

GREENWOOD: Physiology of the Senses.

SULLY: Outlines of Psychology (new impression).

STOUT: Manual of Psychology.

JAMES: Text-book of Psychology.

KULPE: Outlines of Psychology.

LADD: Psychology—Descriptive and Explanatory.

## PAPER II—

### Ethics.

#### *Recommended text-books:—*

A. C. MITRA: Elements of Morals (omitting Chapter IX: 17-26, Chapter X: 13-14, Chapter XI: 2-9 and Chapter XII: 2-13).

#### *Books that may be consulted:—*

MUIRHEAD: Elements of Ethics.

MACKENZIE: Manual of Ethics.

HYSLOP: Elements of Ethics.

SETH: Ethical Principles.

PAULSEN: System of Ethics.

MILL: Utilitarianism.

SPENCER: Data of Ethics.

SORLEY: Recent Tendencies in Ethics.

ROGER: Short History of Ethics.

## PAPER III —

General Philosophy—European and Indian.

(1) KULPE'S Introduction to Philosophy.

(2) *Sāṅkhya-Kārika*, with Gaudapada's Commentary.

N. B.—In this paper, 50 per cent of the total marks shall be assigned to Indian Philosophy. Students will be required to show a general acquaintance with the outlines of Philosophic thought, both European and Indian, for which the following books are suggested for study:—

ROGER: History of Philosophy:

CUSHMAN: Beginners' History of Philosophy—Ancient and Modern.

SRINIVASA IYENGAR: Outlines of Hindu Philosophy.

#### *Books that may be consulted:—*

SCHWEGGLER: History of Philosophy.

WEBER: History of Philosophy.

PAULSEN: Introduction to Philosophy.

OSKIN: Persistent Problems of Philosophy.

MAX MULLER: Six Systems of Indian Philosophy.

GARBE: Outlines of Indian Philosophy.

*Sāṅkhya-tattva Kaumudi.*



## HONOURS COURSE.

Besides the papers mentioned above, candidates offering the Honours course will have to take up an advanced Course in Logic, in which ONE paper, of three hours' duration, will be set; and in this paper 33 per cent of the total marks shall be assigned to Indian Logic.

*Books recommended for study:—*

- (1) BAIN: Logic—Deductive and Inductive.
- (2) WELTON: Manual of Logic—Deductive (omitting Books IV—Chapters III-VI) and Inductive.
- (3) CREIGHTON: Introductory Logic (Part III only).
- (4) *Tarkabhâṣa* of Kesava Misra.

*Books that may be consulted:—*

MILL: System of Logic.  
 JEVONS: Principles of Science.  
 PEARSON: Grammar of Science.  
 GIBSON: Problem of Logic.  
 BOSANQUET: Essentials of Logic.  
 JOSEPH: Introduction to Logic.  
 B. N. SEAL: Positive Science of the Hindus (Chapter VII).

*Gautama Sûtras*, with *Vishwanâth Vritti*.

*Padârtha-Sâra* of Kesava Misra (Paṇini Office, Allahabad).

*Note.*—The books recommended for study are not meant to be used as prescribed text-books, but as indicating the general scope of studies in the subjects to which they relate. In Indian Philosophy, however, the questions should be confined, as far as possible, to the books recommended.

## Mathematics.

### Ordinary Course.

There will be THREE papers, each of 3 hours' duration. The *first* paper will be on Analytical Geometry, the *second* on Algebra and Differential Calculus and the *third* on Trigonometry and Integral Calculus.

#### FIRST PAPER.

*Analytical Geometry.*—Straight line. Circle. Parabola. Ellipse. Hyperbola. General equation of the second degree, treated by means of rectangular, oblique and polar co-ordinates.

#### SECOND PAPER.

*Algebra.*—Convergence and divergence of series. Simple continued fractions. Partial fractions. Easy Inequalities. Determinants. Elimination.

*Differential Calculus.*—Differentiation. Successive differentiation. Development of functions. Indeterminate forms. Partial differential co-efficients. Maxima and minima for a single variable. Tangents and normals to curves. Asymptotes. Multiple points on curves. Envelopes. Convexity. Concavity. Points of inflexion. Radius of curvature. Evolutes. Curve tracing.

#### THIRD PAPER.

*Trigonometry.*—Inverse trigonometrical functions. DeMoivre's theorem. Summation of trigonometrical series. Hyperbolic functions. Expansion of trigonometrical functions.

*Integral Calculus.*—General methods of integration. Standard forms. Integration by parts. Formulæ of reduction. Rectification of plane curves. Quadrature. Surfaces and volumes of solids of revolution.

*Honours Course.*

This will consist of the Ordinary B. A. Course, plus the third paper of the B. Sc.

**Political Economy and Political Philosophy.**

There will be THREE papers, as noted below, each of three hours' duration. A fourth paper of three hours will be added for the Honours course.

*Ordinary Course.***PAPER I—**

General Economic principles, with their applications to Indian conditions.

*Books recommended :—*

MARSHALL: Economics of Industry.

GIDE: Political Economy (Archbold's Translation).

MORRISON: The Economic Transition in India.

**PAPER II—**

Banking, Currency and Finance to be studied in greater detail, with special reference to Indian conditions.

*Books recommended :—*

WITHERS: Meaning of Money.

ARMITAGE SMITH: The Principles and Methods of Taxation.

ALSTON: Elements of Indian Taxation.

KEYNES: Indian Currency and Finance (omitting 6th and 8th Chapters).

**PAPER III—**

Political Science—

Gettel: Introduction to Political Science.

Hogan: Government of the United Kingdom.

MONTAGUE-CHELMSFORD Report, first seven Chapters only.

*Honours Course.***PAPER IV—**

Indian Trade Review and the Financial Statements for the two years immediately preceding that in which the examination is held.

CUNNINGHAM : Western Civilisation in its Economic Aspects. Vol. II, Modern Times.

TAUSSIG : Some Aspects of the Tariff Problem.

LEES SMITH : India and the Tariff Problem.

*For further consultation—*

CHAMBERLAIN'S Commission Report on Indian Currency.

The latest Decennial Moral and Material Progress Report.

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**History.**

There will be THREE papers, each of three hours' duration. A *fourth* paper, of three hours, will be added for the Honours Course.

**ORDINARY COURSE.**

**PAPER I—**

(Europe from 1453, with special reference to the 19th Century).

A. J. GRANT : History of Europe. New Ed. Part III only.

SEIGNOBOS : Contemporary Civilization.

LIPSON : Europe in the 19th Century.

**PAPER II—**

*Either* A (Ancient India).

V. A. SMITH : Early History of India.

„ „ : *Asoka* (Rulers of India).

RHYS DAVIDS : Buddhist India (Story of Nations).

or B.—(Mediæval India).

LANE-POOLE: Mediæval India under Muhammad-an Rule.

: Mediæval India from Contemporary Sources (Cooper & Co.).

V. A. SMITH: Akbar, the Great Mughal.

RANADE: Rise of the Maratha Power, Vol. I.

or C.—(British India).

LYALL: Rise and Expansion of the British Dominion.

INNES: Short History of the British in India.

R. C. DUTT: Economic History of India under early British Rule.

R. C. DUTT: Economic History of India in the Victorian Age.

#### PAPER III.—

(Economics and Political Science).

ELY AND WICKER: Elementary Principles of Economics, revised and adapted for English students, by L. L. Price (Macmillan).

LEACOCK: Elements of Political Science.

[The student is recommended to consult Seeley's *Introd. to Political Science* also].

#### HONOURS COURSE.

#### PAPER IV—

*Either* A (*History of England, from 1485*).

J. R. GREEN: *Short History of the English People*. New Ed., by Mrs. Green.

TOWNSHEND WARNER: *Landmarks of Industrial History*.

MONTAGUE: *Elements of English Constitutional History*.

or B (*India under the Crown: Political, Social, Religious and Cultural Developments*.)

Syllabus and text-books to be announced later.

**B. Sc. EXAMINATION.**

(A) SUPPLEMENTARY EXAMINATION FOR CANDIDATES WHO FAILED IN 1919.

(Same as the Allahabad University B.Sc. Course for 1919).

(B) ORDINARY EXAMINATION FOR NEW CANDIDATES.

**English.**

There will be a paper on General Composition, of three hours, and another on Special Composition, of the same duration, bearing on books prescribed for general study, some of which will treat of Scientific subjects. There will also be a *viva voce* examination.

*Non-detailed study*—As in the B. A., but for NEW-MAN'S Idea of a University, there will be substituted :

HUXLEY : Man's Place in Nature and other Essays ;  
and

TYNDAL : Glaciers.

**Mathematics.**

There will be THREE papers, each of three hours' duration.

(i) The *first* paper will be on Algebra, Trigonometry and Analytical Geometry.

(ii) The *second* paper will be on Differential and Integral Calculus.

(iii) The *third* will include Statics, Kinetics of a Particle, and Hydrostatics.

**FIRST PAPER.**

*Algebra*.—Convergency and divergence of series. Simple continued fractions. Partial fractions. Easy inequalities. Determinants. Elimination.

*Trigonometry*.—Inverse trigonometrical functions. De Moivre's theorem. Summation of trigonometrical series. Hyperbolic functions. Expansion of trigonometrical functions.

*Analytical Geometry.*—Straight line. Circle. Parabola. Ellipse. Hyperbola. General equation of the second degree, treated by means of rectangular, oblique and polar co-ordinates.

#### SECOND PAPER.

*Differential Calculus.*—Differentiation. Successive Differentiation. Development of functions. Indeterminate forms. Partial differential co-efficients. Maxima and minima for a single variable. Tangents and normals to curves. Asymptotes. Multiple points on curves. Envelopes. Convexity. Concavity. Points of inflexion. Radius of curvature. Evolutes. Curve tracing.

*Integral Calculus.*—General methods of integration. Standard forms. Integration by parts. Formulæ of reduction. Rectification of plane curves. Quadrature. Surfaces and volumes of solids of revolution.

#### THIRD PAPER.

*Statics.*—General conditions of equilibrium of a particle and of a rigid body under the action of forces in one plane. The principle of virtual work. Simple machines. Friction. Centres of gravity. Common catenary. Hook's Law.

*Kinetics of a Particle.*—Velocity and acceleration. Newton's Laws of Motion. Work and Energy. Rectilinear Motion. Projectiles in vacuum. Circular and Harmonic Motion. Simple and Cycloidal Pendulum. Impact

*Hydrostatics.*—Fluid pressure. Pressure on immersed surfaces. Conditions of equilibrium of a floating body. Specific gravity. Properties of gases. Machines depending upon fluid pressure.

*Books recommended :—*

1. HALL AND KNIGHT: Higher Algebra.
2. LONEY: Trigonometry, Part II.

3. C. SMITH : Analytical Conics.
4. EDWARD : Differential Calculus.
5. GANESH PRASAD : Integral Calculus. .
6. LONEY : Treatise on Elementary Dynamics.
7. First *three chapters* of Williamson and Tarleton's Dynamics.
8. ROUTH OR MINCHIN : Statics, Part I.
9. BESANT : Elementary Hydrostatics.

### Chemistry.

There will be TWO papers, each of three hours' duration, and *two days'* practical examination.

#### INORGANIC CHEMISTRY.

The occurrence, preparation and properties of the elements and their more important compounds, excluding the rare elements, but including the following :—

Lithium, Platinum, Argon, Helium, Selenium, Tellurium, Molybdenum, Thallium, Titanium and Tungsten.

Radium and its more important properties.

#### ORGANIC CHEMISTRY.

General principles of Organic Chemistry, including qualitative and quantitative analysis.

Occurrence, preparation, general properties and constitutional formulæ of the following :—

Paraffin, its haloid derivatives, alcohols, ethers, aldehydes, ketones, fatty acids, the acid chlorides, anhydrides and amides, the esters, soaps, fats, and saponification, hydrolysis.

Amines, cyanogen, hydrocyanic acid, nitriles and carbamides, potassium cyanide, ferro and ferricyanides, nitroparaffins.



Zinc ethyl and magnesium ethyl-iodide.

The olefines and acetylenes.

Ethylene, glycol, glycerine, nitro-glycerine, carbohydrates, glucose, cane sugar, starch and cellulose, inversion of cane sugar—optical activity.

Lactic acid and the stereoisomerism of the lactic acids.

Aceto-acetic ester and its synthetic uses, carbonic acid, carbonyl chloride and urea.

Oxalic acid, and the synthetic uses of the malonic ester.

Tartaric acid, and the stereoisomerism of tartaric acids and of the unsaturated dibasic acids.

Aromatic hydrocarbons. Kekule's theory. Armstrong's formula. Orientation. Nucleus and side chain compounds. Benzene. Toluene. Common haloid derivatives of benzene, and toluene. Nitro and dinitro benzene.

Amino compounds—aniline and benzylamine. Diazo reaction. Diazo-benzene chloride. Azo and hydrozo benzene. Benzene sulphonic acids. Phenol. Benzyl alcohol. Benzaldehyde. Acetophenone. Benzophenone Benzoic acid. Benzoic anhydride. Benzamide. Benzoyl chloride and benzoic esthers.

Elementary discussion concerning Naphthalene and Anthracene.

#### PHYSICAL CHEMISTRY.

Atomic and Molecular hypothesis.

Kinetic theory of gases, and Van Der Waal's equation.

The periodic classification of elements. Electrolysis. The theory of electrolytic dissociation. Gaseous dissociation. Spectrum analysis. Elementary ideas of

the different crystallographic systems. Osmotic pressure, and theory of dilute solutions. The determination of the atomic and molecular weights. Boiling and freezing point methods. Theories of mass action, of catalysis, of indicators. Phase rule. Thermochemistry. Elementary ideas about Radio Activity. Avidity of acids and bases. Relation between the chemical properties and the physical constants.

### *Practical Chemistry.*

1. Qualitative analysis of a mixture, containing not more than four radicals (organic acids and bases excluded, except acetic, oxalic and tartaric. Platinum and gold also excluded).

2. Volumetric analysis. —Alkalimetry. Estimation of iron by potassium permanganate, and by potassium bichromate. Oxalic acid by permanganate. Iodine by thiosulphate.

3. Gravimetric analysis. Analysis of a silver coin and estimation of iron, barium, aluminium, zinc, magnesium and calcium in their simple salts. Estimation of chlorides and sulphates.

4. Determination of vapour density *by Victor Meyer's method.*

5. Detection of carbon, hydrogen, nitrogen, sulphur and chlorine in organic compounds. Determination of boiling and melting points. Fractional distillation. Distillation in steam.

6. Preparation of the following :—

Ethyl ether, ethyl iodide, acetaldehyde, acetone, acetamide, benzene, nitro-benzene, dinitro-benzene, chloroform, iodoform, formic acid, diazo-benzene chloride.

iodoform, formic acid, diazo-benzene chloride, azo-benzene, aniline, phenol.

7. Preparation of ANY ONE of the following—one or two samples to be submitted at the end of two years to the examiner at the time of the practical examination. As far as possible, substances obtainable in India should be employed in this work. The candidates to find out their own information from books.

- A sample of soap,
- A sample of candle,
- A sample of pure oil from crude oil,
- A sample of one or two dye-stuffs,
- A sample of glass,
- A sample of laboratory glass-blowing, or
- Any other similar product of every-day use.

Attention is directed to the importance of candidates keeping complete records of their practical work. When presenting themselves for the examination, they are required to submit their note-books containing records of their practical work performed during the two last years' training for inspection, by the examiner, *who will take them into account in deciding the examination*. Candidates are expected to be able to use logarithms in their calculations. During the practical examination, *candidates are at liberty to consult any books of reference which they choose*.

Books recommended :—

(*Theoretical*).

NEWTN : Inorganic Chemistry.

MELLOR : Modern Inorganic Chemistry.

ALEXANDER SMITH : General Inorganic Chemistry.

WALKER : Introduction to Physical Chemistry.

CAVEN AND LANDER : Systematic Inorganic Chemistry.

VAN DEVENTER : Physical Chemistry for Beginners.

COHEN : Theoretical Organic Chemistry.

PERKIN AND KIPPING : Organic Chemistry.

(*Practical*).

VELENTINE AND HODKINGSON : Practical Chemistry.

CLOWES : Qualitative Analysis.

CLOWES AND COLEMAN : Quantitative Analysis.

NEWTN : Qualitative and Quantitative Analysis.

COHEN : Practical Organic Chemistry.

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### Physics.

The examination in Physics shall consist of two papers, each of three hours' duration.

*1st paper* :—General properties of Matter, Sound and Heat.

*2nd paper* :—Light, Electricity and Magnetism.

There will also be a Practical Examination in Physics.

The following Syllabus is prescribed:—

#### GENERAL PROPERTIES OF MATTER.

Matter, Mass, Energy. Units and Dimensions. Use of Dimensional Equations. Newton's Laws of Motion. Atwood's Machine. Kepler's Laws of Universal Gravitation. Cavendish Experiment. Boy's Experiment. Elementary Problems on Attraction, *e.g.*, attraction of a Sphere and Spherical Shell at internal and external points. Attraction of a Disc. Gauss' Theorem. Definition of Potential and its determination in simple cases. Equipotential Surface

and Lines of Force, and elementary propositions connected therewith. Definition of Elasticity. Hooke's Law. Young's Modulus. Modulus of Rigidity. Bulk Modulus. Definitions of Moments of Inertia and Radius of Gyration. Calculation of Moments of Inertia in simple cases, *e.g.*, thin rod, ring, rectangular and circular plates, cylinders, solid and hollow spheres, right cone.

Balance.

Boyle's Law. Air-pump.

Simple Harmonic Motion. Vibration of Simple Pendulum. Kater's Pendulum.

Cohesion of Liquids. Surface Tension and Viscosity, and their determinations.

### SOUND.

Production and Propagation of Sound. Determination of Velocity of Sound and its connection with the Elasticity and Density of the Medium. Doppler's Principle. Reflection, Refraction and Interference of Sound. Beats. Stationary and Progressive Undulations. Methods of determining Frequency and Wave-lengths of Notes. Vibration of Strings and Columns of Air. The application of Fourier's Theorem to the Analysis of Complex Sounds. Experimental methods of analysing complex sound. Lissajous' Figures. Structure of the Ear. Consonance and Dissonance. Application of the equation —

$$y = a \cos \frac{2\pi}{\lambda} (vt - x)$$

to simple problems in Interference.

### HEAT.

Thermometry. Co-efficients of Expansion and their variation with Temperature. Unit of Heat and Calorimetry. Specific Heat. Change of State and Latent Heats. Vapour-pressures and their determi-

nation. Hygrometry. Radiant Heat. Its Reflection, Refraction, Absorption and Emission. Prevost's Theory of Exchanges. Conductivity. Determination of Coefficients of Conductivity. Indicator Diagrams. Carnot's Heat Engine. First and Second Laws of Thermodynamics. Four Thermodynamical Relations and their simple applications. Absolute Scale of Temperature. Determination of Mechanical Equivalent of Heat. Kinetic Theory of Gases. Van Der Waal's Equation.

### LIGHT.

Propagation of Light. Determination of Velocity of Light. Reflection and Refraction. Mirrors and Lenses. Dispersion and Spectrum Analysis. Spherical and Chromatic Aberration. Achromatic Lenses. Telescopes and Microscopes. Ramsden's and Huyghen's Eye-pieces. Elementary knowledge of the Structure of the Eye and Defects of Vision. Binocular Vision. Undulatory Theory of Light. Rectilinear Propagation of Light. Deduction of the Laws of Reflection and Refraction. Interference of Light. Newton's Rings and Colours of Thin Plates. Diffraction. Double Refraction in Uniaxial Crystals. Quarter-wave Plate. Plane, Circularly and Elliptically Polarised Light. Interference of Polarised Light. Rotation of Plane of Polarisation. Bi-quartz. Simple Polarimeter.

### MAGNETISM.

Lines of Magnetic Force. Magnetic Potential. Action of one magnet on another, broadside or endways. Determination of Magnetic Moments. Horizontal Component of Earth's Magnetic Force and the Dip. Magnetic Induction. Coefficients of Magnetisation and Induction. Permeability. Hysteresis. Diamagnetism.

## ELECTRICITY.

Proof of the Law of Electric Repulsion. Induction. Specific Inductive Capacity. Thomson's Quadrant and Absolute Electrometers. Calculation of Potential. Capacity and Energy in simple cases. Frictional and Influence Machines.

The Electric Current. Galvanometer. Determination of Resistance. Ohm's Law. Joule's Law. Determination of E. M. F. and Internal Resistance of Batteries. Conjugate System of Conductors. Electrolysis and Electrochemical Equivalents. Thermo-electric Currents. Peltier and Thomson Effects. Electromagnetism. Electromagnetic Induction. Coefficients of Mutual and Self Induction. Ruhmkorff's Coil. Elementary Theory of Simple Dynamos, Motors and Transformers. Electrical measuring instruments, *e. g.*, Ammeter, Voltmeter. Oscillations during discharge of a Leyden Jar and their relation to Hertzian Waves. A non-mathematical account of the Electromagnetic Theory of Light. Discharge of Electricity through Gases. Cathode Rays and X-Rays. Elements of Radio-activity.

The following books are suggested :—

WAGSTAFF : Properties of Matter.

CAPSTICK : Sound.

POYNTING AND THOMSON : Heat.

EDSER : Light.

WHETHAM : Experimental Electricity.

WATSON : Text-book of Physics.

POYNTING AND THOMSON : Sound.

For the Practical Examination, the subjoined list of experiments indicates the ground to be covered :—

1. Balance. Mass and Densities.
2. Comparison of Lengths by the Travelling Microscope.

3. Determination of Coefficient of Friction between a Rope and Pulley.

4. Determination of Young's Modulus of a Wire.

5. Determination of Young's Modulus of a Bar.

6. Modulus of Torsion.

7. Moment of Inertia of a Fly-wheel.

8. Wheel and Ball on Inclined Plane.

9. Determination of "g" by Simple Pendulum.

10. Fortin's Barometer. Boyle's Law.

11. Determination of Height by Aneroid Barometer.

12. Determination of Surface Tension.

13. Velocity of Sound by Resonance.

14. Determination of Pitch by Sonometer.

15. Determination of Time by observation of altitude of Sun with a Sextant.

16. Determination of Refractive Index by the Microscope.

17. Focal Lengths of Mirrors and Lenses.

18. Magnifying Power of Telescopes and Microscopes.

19. The Spectrometer.

20. Photometry.

21. Determination of Wave-length by Plane Diffraction Grating.

22. Effect of Steam Exposure on Thermometer Readings.

23. Coefficient of Linear Expansion.

24. Weight Thermometer.

25. Constant Volume Air Thermometer.

26. Constant Pressure Air Thermometer.

27. Calorimetry.

28. Law of Cooling.

29. Dew-point and Humidity.

30. Magnetic Moments and Neutral Points.

31. Determination of "H."



32. Determination of Dip.
33. Magnetic Field due to a Straight Current.
34. Variation of strength of magnetic field due to a circular coil with the distance along the axis.
35. Comparison of E. M. F.'s by a Tangent Galvanometer.
36. Potentiometer.
37. Resistance of Accumulators.
38. Post-Office Box. Resistance of Coil, Galvanometer and Battery.
39. Electro-chemical Equivalent of Copper.
40. Electrical Determination of "J."

The book recommended for practical work :—

ALLEN AND MOORE: Text-Book of Practical Physics.

An account of each experiment must be written in a special note-book, which will be examined. The account of each experiment should be signed by the Demonstrator and the books should be kept in his charge.

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### Botany (with Vegetable Physiology).

There will be TWO papers, as noted below, each of three hours' duration. There will also be a practical test.

1. *Histology*.—The detailed structure of plant cell. Primary and secondary tissues; their origin and distribution.

2. *Organography*.—The morphological differentiation of the plant body in the main groups of the Vegetable Kingdom. The morphology of the root and shoot in the Pteridophyta and Spermaphyta. The phenomena of alternation of generation and the homologies in the stages of the life-history of the Archegoniates and the Spermaphyta.

### 3. *Systematic*.—The Systematic Morphology and Physiology of—

#### FIRST PAPER.

#### A. Thallophyta :—

- (i) Schizophyte :—Oscillaria ; Bacteria.
- (ii) Algæ :—Pleurococcous ; Spirogyra ; Oedogonium ; Vaucheria ; Fucus.
- (iii) Fungi :—
  - (a) Phycomycetes :—Pythium or any other Oomycete : mucor or any other zygomycetes.
  - (b) Ascomycetes :—Saccharomycetes ; Eurotium
  - (c) Basidiomycetes ;—Puccinia ; Agaricus.

#### B. Bryophyta :—

- (i) Hepaticæ :—Marchantia.
- (ii) Musci :—A Funaria or any other moss.

#### C. Pteridophyta :—

- (i) Lycopodiales :—Selaginella.
- (ii) Fillicales :—Aspidium or any other fern ; marsilia.

#### SECOND PAPER

#### D. Spermaphyta :—

Gymnosperma :—Cycas ; Pinus.

Angiosperma :—Liliaceæ. Amaryllideæ, Irideæ, Scitamineæ, Palmaceæ, Gramineæ, Ranunculaceæ, Papaveraceæ, Cruciferæ, Violaceæ, Malvaceæ, Rutaceæ, Meliaceæ, Rhamnæ, Anacardiaceæ, Leguminosæ, Rosaceæ, Cucurbitaceæ, Cactæ, Umbelliferæ, Compositæ, Solanaceæ, Labiataæ, Euphorbiaceæ, Ficaceæ.

The characteristics of the above families to be illustrated by examples from the flora of the United Provinces.

*Physiology*—Turgidity and tension of tissues. The distribution of mechanical tissue. The physiology of

Nutrition, Respiration, Growth, and Reproduction. The phenomena of Movement. An elementary knowledge of Plant Ecology.

#### PRACTICAL WORK.

The candidates shall be required to (a) examine and describe microscopic specimens, (b) to prepare and stain microscopic sections of plants and plant tissues, (c) to dissect and describe the plants and parts thereof, and (d) to refer the plants to their respective position in the foregoing syllabus for classification.

They shall also be required to perform fundamental experiments in Plant Physiology.

N.B.—A record of all the practical work done in Laboratory must be produced at the time of practical examination.

The following books are suggested :—

SCOTT: Structural Botany, 2 Vols.

STRASBURGHER: Text-book of Botany.

COULTER, BARNES AND COWLES: Text-book of Botany (American Book Company, Chicago).

J. W. OLIVER: Systematic Botany.

F. COVERS: Practical Botany (University Tutorial Press).

STRASBURGHER AND AILLHOUSE: Practical Botany (Sonnenschein).

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#### Zoology (with Animal Physiology).

There will be two papers, as noted below, each of three hours' duration. There will also be a practical test.

The structure and phenomena of the animal-cell treated in some detail; Asexual and Sexual Reproduction; Heredity, Variation and Evolution.

The general characteristics of animal tissues, including blood, lymph, epithelia, together with the nervous and connective tissues.

The structure, habits, and development of the following groups, as illustrated by :—

#### FIRST PAPER.

Protozoa—Amœba, Paramœcium, Euglena and Monocystis.

Porifera—Sycon, Spongilla.

Cœlentera—Hydra, Obelia, Aurelia, Alcyonium.

Platyhelminthes—Liver-Fluke, Tænia.

Echinodermata—Asterias, Echinus, Cucumaria.

Annulata—Earthworm, Nereis and Leech.

Arthropoda—Prawn, Periplaneta, Anopheles (including an outline of the life-history of the malaria parasite), and Scorpion.

Mollusca—Unio, a Pond Snail, and Sepia.

#### SECOND PAPER.

Acrania.

Hemichordata.—Balanoglossus.

Urochordata.—Ciona or other Ascidian.

Cephalochordata.—Amphioxus.

Craniata.

Pisces.—Scyllium or other Elasmobranch and the "Rohu" or an allied Teleostean.

Amphibia.—The Frog.

Reptilia.—Calotes.

Aves.—Columba.

Mammalia.—Echidna, a Marsupial, Lepus.

The outlines of the developments of Amphioxus, Frog, Chick, and Rabbit; placentation.

**Physiology.**—The same as for the Intermediate, but a higher standard would be expected. Also an elementary knowledge of the structure and function of the nervous system and of the sense organs.

### PRACTICAL WORK.

Candidates will be required to show a knowledge of microscopical work, to examine, dissect, and describe the animals named in the foregoing syllabus.

Note-books containing a record of Laboratory work, must be produced at the practical examination.

Text-books suggested :—

PARKER AND HASWELL: Text-book of Zoology, 2 vols. (Macmillan).

THOMSON: Outlines of Zoology (Pentland).

MARSHALL AND HURST: Practical Zoology (Smith Elder).

WIEDERSHEIM: Comparative Anatomy of Vertebrates.

LOCK: Recent Progress in Heredity, Variation and Evolution.

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### Mineralogy.

(Courses not prescribed).

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### Geology.

(Courses not prescribed).

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### Psychology.

(Courses not prescribed).

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## M. A. EXAMINATION.

### Sanskrit.

There will be FIVE papers in the Previous examination, each of three hours' duration; these will be com-

pulsory for all candidates ; while in the Final, there will be eight groups of subjects, on each of which FOUR papers, each of three hours' duration, will be set, and every candidate shall be required to offer only one of those groups.

N. B.—Sanskrit shall be written in the Devanagri script.

(PREVIOUS).

Paper I.—

(a) The following selections from the four Vedas:—

(i) R̥GVEDA Mandala 1, Sûktas 24, 31 and 32.  
Mandala IX, Sûktas 1 and 2.  
Mandala X, Sûktas 34, 108 and 129.

(ii) YAJURVEDA : Adhyâya 1, Mantras 1-16.  
Adhyâya XL, Mantras 1-18.

(iii) SAMAVEDA : First five Richas from Uttara-  
rarchika.

(iv) ATHARVAVEDA : Kâṇḍa VI, Sûktas 35-43.  
Kâṇḍa XV, Sûktas 1-3.  
Kâṇḍa XX, Sûkta 34.

(b) Kāṭha Upaniṣad, with Śaṅkara Bhāṣya.

(c) Vedic Grammar : Siddhântakaumudî Vai-  
diki Prakriyâ.

Paper II.—

Sarvasiddhântasangraha (Ed. by Ranga-  
charya).

Sāṅkhya-Kārikā, with Tattvakaumudî.  
Bhāṣâparichcheda.

Paper III.—

Śiśupālavadha—1 and 2.  
Kirātārjunīya—1 and 2.  
Madhya-Kaumudî.

Paper IV.—

Prākṛitalakṣaṇa.  
Mr̥chchhakaṭika.  
Sāhityadarpaṇa—Ch. 10.

## Paper V.—

- (a) Macdonnell's History of Samskrit Literature  
(75 marks)
- (b) Bühler's Indian Paleography (with Plates),  
or Gauri Shankar Ōjha's Prāchīnalekha-  
malā (25 marks).

(FINAL)

GROUP A.

*Vedic Literature.*

## Paper I.—

- (a) Selected portions of Vedic Samhitās :—  
Yajurveda—Ādh. 16.  
R̥gveda—Pavamāna Sūkta.  
Atharva Veda—Chs. 1 and 2.
- (b) Brāhmaṇa—Aitareya (last chapter).
- (c) Upaniṣad—Taittirīya.
- (d) Aranyaka—Aitareya.

## Paper II.—

Sāyana's Introduction to his R̥gvedabhāṣya.  
Charaṇavyūha.

## Paper III.—

Macdonnell's Vedic Grammar for Students;  
Saunaka's or Kātyāyana's Pratiśākhya.  
Bhandarkar's Wilson Lectures.

## Paper IV.—

Composition.

GROUP B.

*Vyākaraṇa.*

## Papers I &amp; II.—

Siddhāntakaumudī (omitting Svaraprakriya) or  
Astādhyāyī, with Kāśika.  
Muir's Texts, Vol. II.

## Paper III.—

Vaiyākaraṇabhūṣaṇasāra.  
Mahābhāṣya—Paspashāhnika.

Paper IV.—

Composition.

JOYCE: Principles of Comparative Philology.

Introduction to the Study of the History of Languages.

GROUP C.

*Kāvya-Sāhitya.*

Paper I.—

Vālmīki—Sundarkāṇḍa.

Mahābhārata, Chapters 1-20 of the *Santiparva*.

Shrīmadbhāgavata, Chapters 1-20 of the Skandha XI.

Dharmaśarmābhyudaya (1 & 2).

Sundarānanda (1 to 6).

Buddhacharita (Cantos 2 to 5).

Naiṣadhacharita—Canto 1.

Śiśupālavadha (11 and 12).

Paper II.—

Śakuntalā.

Svapnavāsavadattā.

Pratijñāyugandharāyaṇa.

Prabodhachandrōdaya.

Veṇisamhāra.

Daśarūpaka.

Nāṭyaśāstra, Chapters VI, VII, XVIII, XIX, XX, XXIV, XXV, XXVI, XXVIII.

Paper III.—

Kāvya prakāśa.

Paper IV.—

Composition.

GROUP D.

*Dharmasāstra.*

Paper I.—

Mānu.

Yājñavalkya, with Mitākṣarā on Vyavahāra.

Apastamba Dharmasūtra.



## Paper II.—

Jimûtavâhâna—Vyavahâramâtrkā and Dâya-  
bhâga.

Vîramitrôdaya—Paribhasâprakâśa.

## Paper III.—

Jaiminiya-Nyâyamâlâvistara. (Adhs. 1 to 3).

## Paper IV.—

Composition.

GROUP E.

*Mîmâmsâ.*

## Paper I.—

Śabara —I-III.

Tantravârttika I.

## Paper II.—

Subodhini (IV to XII).

## Paper III.—

Prakaraṇapañchikâ.

## Paper IV.—

Composition.

GROUP F.

*Nyâya—Vaiśeṣika.*

## Paper I.—

Vâtsyâyanabhâṣya.

Vârttika—I.

## Paper II.—

Nyâyamañjari (Chapter on Prameya only).

Kusumâñjali—Kârikâs, with Haridasi.

Nyâyabindu.

Six Buddhist Nyâya Tracts (Bengal Asiatic So-  
ciety).

Pariksâmukhasûtra.

**Paper III.—**

- (a) Vaiśeṣika-sûtras.
- (b) Praśastapâda-bhâṣya.
- (c) Nyâya-muktâvalī.

**Paper IV.—**

Composition.

**GROUP G.**

*Vedânta.*

**Paper I.—**

- Sârîraka Bhâṣya—I and II, i and ii.
- Srî-Bhâṣya I-i, 1 to 4.
- Aṇu-Bhâṣya--1-i, 1 to 4.

**Paper II.—**

- Siddhânta-leśa.
- Vivarâṇaprameyasamgraha I.
- Pañchadasî.

**Paper III.--**

- Purva-Mîmâmsâsûtra, with Subodhini I.
- Bhagavadgîtâ.
- Mânḍukya-Upaniṣad, with Gaudâpâda-kârikâs.

**Paper IV.--**

Composition.

**GROUP H.**

*Epigraphy and Paleography.*

**Paper I.---**

- Asoka and Kusana Inscriptions.
- RAPSON: Ancient Indian Coins.

**Paper II.--**

Gupta Inscriptions.

**Paper III.—**

Cunpningham's Geography, with later identifications.

Kalhaṇa's Rājatarāṅgiṇī (Ch. 8), with Stein's Preface.

Rāmcharitra (Memoirs: Asiatic Society of Bengal).

Paper IV.—

Composition.

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### English.

There will be NINE papers for the M. A. Examination, each of three hours' duration, any four of which will be for the Previous and the other five for the Final. Two papers will be in poetry, one in texts from Chaucer to the end of the 18th century, and the other in texts of the 19th and 20th centuries. There will be two corresponding papers in prose, and two in drama, one on at least four representative plays of Shakespeare and the other on other specimens of English Dramatic Literature. There will also be a paper on representative specimens of English Criticism, and two others, one in the History of English Literature and the other in Essay-writing, on an advanced literary subject. A knowledge of the History of English Literature will be demanded of the student, not only in the special paper on the subject, but also in all the papers on text-books, and the examination in Shakespeare will include a general acquaintance with Shakespearian Art and Criticism.

*N. B.—Alternative questions will be set at least to the extent of half the number of questions in each paper.*

#### 1. Poetry—Part I.

CHAUCER: Prologue.

MILTON: Paradise Lost, Books I-IV.

POPE: Essay on Man.

GRAY: Odes.

2. *Poetry—Part II.*

WORDSWORTH: Selections, Part I (Macmillan).

SHELLEY: Selections (English Romantic Poets, Cambridge University Press).

BYRON: Childe Harold's Pilgrimage, Canto I.

TENNYSON: In Memoriam.

RABINDRANATH TAGORE: The Gardener.

3. *Prose—Part I.*

MORE: Utopia.

ENGLISH ESSAYS: Selected by Peacock. Bacon to Goldsmith (Oxford University Press).

MILTON: Arcopagitica.

GOLDSMITH: Citizen of the World.

Do. Vicar of Wakefield.

RICHARDSON: Pamela.

4. *Prose—Part II.*

LANDOR: Imaginary Conversations (Scott Library).

MACAULAY: Essay on Milton.

ENGLISH ESSAY: Goldsmith to Stevenson. Selected by Peacock (Oxford University Press).

WALTER PATER: The Renaissance.

GEORGE ELLIOT: Romola.

DICKENS: Oliver Twist.

5. *Drama—Part I (Shakespeare).*

Romeo and Juliet.

Much Ado About Nothing.

King Lear.

The Tempest.

Books recommended :--

SIR SIDNEY LEE: Life of Shakespeare.

SIR WALTER RALEIGH: Shakespeare.

DOWDEN : Shakespeare's Mind and Art.

BRADLEY : Shakesperian Tragedy.

MOULTON : Shakespeare as a Dramatic Artist.

#### 6. *Drama—Part II.*

MARLOWE : Tamburlaine :

SHERIDAN : The Rivals.

SHELLEY : Prometheus Unbound.

BERNARD SHAW : Captain Brassbound's Conversion.

Books recommended :—

SHELLING : English Drama (Dent's Channels of English Literature).

WARD : Dramatic Literature.

#### 7. *Criticism.*

SIDNEY : Apology for Poesie.

ADDISON : Criticisms on Paradise Lost.

WORDSWORTH : Prefaces (Heath & Co.).

ARNOLD : Essays on Criticism (Second Series).

MEREDITH : Essay on Comedy.

Books recommended :—

SAINTSBURY : History of English Criticism.

HUDSON : Introduction to the Study of Literature.

COURTHOPE : Life in Poetry and Law in Taste.

#### 8. *History of English Literature.*

Books recommended :—

SAINTSBURY : History of English Literature.

LANG : History of English Literature.

For reference :—

WARD : English Poets.

CRAIK : English Prose.

MORLEY : English Men of Letters Series.

HUDSON : Introduction to the Study of Literature (Harrap).

COWL: Theory of Poetry in England (Macmillan).

HEPPLE: Lyrical Forms in English (Cambridge University Press).

COURTHOPE: History of English Poetry.

Chambers' Cyclopædia of English Literature.

Cambridge History of English Literature.

Oxford Book of English Verse.

Palgrave: Golden Treasury.

9. *Essay.*

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**Pali.**

There will be FOUR papers, each of three hours' duration, in Previous as well as in the Final. In the Final, there will also be a *viva voce* examination.

(PREVIOUS).

Paper I.—

Pali Grammar—*Elmulus*.

Selections from *Mahāvamsa*,

„ „ the *Jātakas*.

Paper II.—

*Dhammapada*.

*Pudgalapannati*, with Commentary.

Paper III.—

*Milindapanha*.

*Dîpavamsa*.

Paper IV.—

Composition.

(FINAL).

Paper I.—

*Tharatherigâthâ*, with *Paramârthadîpani*, by *Dharmapâla*.

Paper II.—

Selections from *Chullavagga* and *Mahāvagga* and *Lalitavistara*.

**Paper III.—**

*Dīghanikāya*, Vol I.

*Bodhicharyavatara*, with Commentary (Ch. 9 only).

**Paper IV.—**

*Kāchchāyana's Grammar*.

*History of Buddhist Literature*.

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**Any other Classical Language.**

ARABIC and PERSIAN.

There will be THREE papers in the Previous Examination and FOUR in the Final Examination, each of three hours' duration. In the *Previous examination*, there will be papers on (i) prose text-books, (ii) unseen prose and verse translation, and (iii) translation into the language; while in the *Final*, there will be papers on (i) essay in the classical language on some literary subject, (ii) questions to be answered in English or Urdu or Hindi on the history of the language and the literature, (iii) on the verse text-books, and (iv) on the special selected subject.

**(A) Arabic.**

*Maqamat* of Harīri (whole).

*Diwan* of Hamasa (whole).

*Diwan* of Mutanabbi.

*Travels* of Ibn Batūta.

*Farazdaq* (first half).

Recommended for study :—

Nicholson's *Literary History of the Arabs* (Fisher Unwin).

Special subject to be chosen from the following :—

(i) Arabic History and Geography.

(ii) Arabic Logic and Philosophy.

(iii) The Quran and Quranic Exegesis.

- (iv) Modern Egyptian Arabic, as exhibited in Green's Grammar and Selections (Oxford Clarendon Press).
- (v) Semetic Philology, with special reference to Wright's Comparative Semetic Grammar (Cambridge University Press).

**(B) Persian.**

*Waqa'i*, of Ni'mat Khan.

*Akhlaq-i-Jalâli*.

Letters of Abul-Fazl.

*Diwan* of Sâib.

*Qasîdas* of Anwari.

*Shahnama* of Firdausi.

*Tazkirat-us-Shu'ara* of Daulat Shah.

Recommended for study :—

Browne's Literary History of India (Fisher Unwin).

*Sîr-ul-'Ajam*, by Shibli. (Dâr-ul-Musannifîn, Azamgarh).

Special subject to be chosen from the following :—

- (i) Old Persian Inscriptions, as given in Tolman's book (American Book Company).
- (ii) Avesta Grammar and Selections from the Avesta, published by A. V. Williams Jackson.
- (iii) The differences between modern and classical Persian, as shown in Roger's Persian Plays, the Vazir-i-Lankuran, and Phillott's Modern Persian Stories (Asiatic Society of Bengal).
- (iv) Persian Philology, with special reference to Gray's Indo-Iranian Philology (Columbia University Press).

**Philosophy.**

N.B. The books recommended for study are not meant to be used as prescribed text-books, but as indicating the general scope of studies in the subjects



to which they relate. In Indian Philosophy, however, the questions should be confined, as far as possible, to the books recommended.

(PREVIOUS).

There will be THREE papers, each of three hours' duration.

PAPER 1.—History of European Philosophy—Ancient, Mediæval and Modern, with special reference to Kant's "Position in Philosophy" as presented in his *Critique of Pure Reason*.

Books recommended for study :—

(1) ZELLER: Outlines of the History of Greek Philosophy.

(2) TURNER: History of Philosophy (Mediæval Period).

(3) FLACKENBERG: History of Modern Philosophy.

(4) WATSON: Selections from Kant.

Books that may be consulted :—

ZELLER: Plato and Aristotle (Longmans).

ADAMSON: Development of Greek Philosophy.

WEBER: History of Philosophy.

DEWULF: History of Mediæval Philosophy (Eng. Translation).

WANDELBOND: History of Philosophy.

ADAMSON: Development of Modern Philosophy.

PERRY: Recent Philosophy.

WATSON: Philosophy of Kant Explained.

PAULSEN: Philosophy of Kant.

PAPER II.—Psychology.

Books recommended for study :—

(1) JAMES: Principles of Psychology.

(2) STOUT: Analytic Psychology.

(3) WARD: Psychological Principles.

Books that may be consulted :—

KULPE: Outlines of Psychology.

BALDWIN: Handbook of Psychology.

SULLY: Human Mind.

ANGELL: Chapters from Modern Psychology.

BALDWIN: History of Psychology.

DESSOIR: History of Psychology.

PAPER III.—Outlines of Indian Philosophy.

Books recommended for study :—

(1) *Saddarshana-Samuchchaya* of Haribhadra.

(2) *Sariraka Bhâsya*—Adhyâya II, Padas 1 and 2.

(3) *Vedântasâra* of Sadânanda, with the Commentary *Subodhinî*.

Books that may be consulted :—

Commentary of Gunaratna on *Saddarshana-Samuchchaya*.

*Sarvadarsana Sangraha*.

*Sarva Siddhânta Sangraha*.

MAX MULLER: Six Systems of Indian Philosophy.

IYENGER: Outlines of Hindu Philosophy.

DEUSSEN: System of the Vedânta.

(FINAL).

There will be FOUR papers in all, of which Paper 1 and Paper IV shall be compulsory. The candidate will have to choose, for the remaining two papers, a subject under Group A, or Group B, or C or D. Each of the papers will be of three hours' duration.

(a) PAPER I.—General Philosophy.

Books recommended for study :—

(1) MARVIN: Introduction to Philosophy.

(2) HOFFDING: Problems of Philosophy.

(3) SCHILLER: Riddles of the Sphinx.

(4) BERGSON: Introduction to Metaphysics.

(5) McDUGALL: Mind and Body.

Books that may be consulted :—

SPENCER : First Principles.

BRADLEY : Appearance and Reality.

JAMES : Pluralistic Universe.

SCHILLER : Studies in Humanism.

STURT : Personal Idealism.

PAULSEN : Introduction to Philosophy.

### PAPERS II AND III.

**Group A.**—Special study of *any one* of the following systems of Indian Philosophy :—

#### (A) NYAYA AND VAISHESIKA.

*First paper.*—Gautama Sūtras, with Vishwanātha Vritti.

*Second paper.*—Kanaḍa Sūtras, with *Upaskara*, or *Prasastapada*.

Books that may be consulted :—

*Vātsyāyana Bhāṣya* on the Gautama Sūtras.

*Kanada Sūtras* and *Vritti* of Jayanarayana.

*Chandrakāntīya Bhāṣya* on *Kanada Sūtras*.

J. C. CHATTERJI : Hindu Realism.

B. N. SEAL : Positive Science of the Hindus, Chapter VII.

*Nyāya-Kandali*.

#### (B) SANKHYA-YOGA.

*First paper.*—*Kapila Sūtras*, with *Aniruddha Vritti* and *Tattwakaumudī*.

*Second paper.*—*Pātanjala Sūtras*, with *Vyāsa Bhāṣya* and the *Vritti*, called *Maniprabhā*.

Books that may be consulted :—

Vijnānbhikṣu's Commentary on the *Kapila Sūtras* and *Yogavârttikâ*.

*Tattwasmāsa Sūtras*.

*Srimad Bhagavatam* (portions bearing on the subjects here).

*Yogavâsisṭham*; Vâchaspati Misra's *Vaisaradi* on the *Vyâsa Bhâṣya*.

(C) VEDANTA.

*First paper.*—*Panchadasî* (the whole); *Brahma Sutras*, with Sankara *Bhâṣya* (Sutras 1-4).

*Second paper.*—*Râmânûja Bhâṣya* (the entire Commentary under Sutras 1-4).

Books that may be consulted :—

Vedântaparibhâṣâ.

Siddhântaleśa.

DEUSSEN : Philosophy of the Upanisads.

Vedârtha Samgraha of Râmânûja.

DEUSSEN : System of the Vedanta.

**Group B.**—Psychology (Special).

*First paper.*—Psychology—Physiological and Abnormal.

Books recommended for study :—

(1) ZIEHEN : Introduction to Physiological Psychology.

(2) WUNDT : Principles of Physiological Psychology, Vol. I (translated by E. B. Titchener).

(3) MERCIER : Psychology—Normal and Morbid.

(4) MYERS : Human Personality.

Books that may be consulted :—

LADD : Physiological Psychology.

TITCHENER : Text-Book of Psychology.

MAUDSBY : Abnormal Psychology.

SIDIS AND GOODHART : Multiple Personality.

JASTROW : The Sub-conscious.

BIANCHI : Psychiatry (English Translation).

N.B.—*Comparative Study of Western and Indian Psychology will be required.*

*Second paper.*—Psychology—Comparative, Social and Religious.

Books recommended for study :—

- (1) LLOYD MORGAN : Comparative Psychology.
- (2) HOBHOUSE : Mind in Evolution.
- (3) McDUGAL : Introduction to Social Psychology.
- (4) STARBUCH : Psychology of Religion.

Books that may be consulted :—

- WUNDT : Human and Animal Psychology.  
 ROMANES : Mental Evolution in animals.  
 ROSS : Social Psychology.  
 BALDWIN : Mental Development—Social and Ethical Interpretation.  
 JAMES : Varieties of Religious Experience.  
 WATSON : Interpretation of Religious Experience (Gifford Lectures).

**Group C.**—Logic.

*First paper.*—Logic—Formal and Symbolic.

Books recommended for study :—

- (1) KEYNE : Formal Logic.
- (2) HUGH MACCOLL : Symbolic Logic.
- (3) SCHILLER : Formal Logic.

Books that may be consulted :—

- DEWEY : Studies in Logical Theory.  
 SIDGWICK : Application of Logic.  
 JEVONS : Principles of Science, Book I.  
 VENN : Symbolic Logic.  
*Second paper.*—Logic as Theory of Knowledge and Methodology.

Books recommended for study :—

- (1) HOBHOUSE : Theory of Knowledge.
- (2) LOTZE : Logic.
- (3) VENN : Empirical Logic.
- (4) ADAMSON : History of Logic.

Books that may be consulted :—

MILL : System of Logic.

JEVONS : Principles of Science.

SIGWART : Logic.

BRADLEY : Principles of Logic.

BOSANQUET : Logic or Morphology of Thought.

B. N. SEAL : Appendix to Dr. P. C. Roy's Hindu Chemistry, Vol. II.

N.B.—*Comparative study of Western and Indian Logic will be required*

**Group D.**—Ethics and Social Philosophy.

*First paper.*—Ethics.

Books recommended for study :—

(1) GREEN : Prolegomena to Ethics.

(2) WUNDT : Ethics.

(3) ALEXANDER : Moral Order and Progress.

(4) ROGER : Short History of Ethics.

Books that may be consulted :—

ARISTOTLE : Nichomachean Ethics.

ROYCE : Philosophy of Loyalty.

KANT : Theory of Ethics (Abbot).

STERRET : Ethics of Hegel.

MARTINEAU : Types of Ethical Theory.

SIDGWICK : Methods of Ethics.

LESLIE STEPHEN : Science of Ethics.

WILLIAMS : Evolutional Ethics.

TAYLOR : Problem of Conduct.

SIDGWICK : History of Ethics.

*Second paper.*—Social Philosophy.

Books recommended for study :—

(1) MACKENZIE : Introduction to Social Philosophy.

(2) GIDDING : Principles of Sociology.

(3) WRIGHT : Elements of Practical Sociology.

Books that may be consulted:—

SPENCER : Principles of Sociology.

MAINE : Ancient Laws.

TAYLOR : Primitive Culture.

FRASER : Psyche's Task.

WESTERMARCH : History of Moral Ideas.

N.B.—*Comparative study of Western and Indian Ethics and Sociology will be required.*

PAPER IV—Essay.

N. B.—*Alternative questions (one of which will have to be attempted) are to be set on the subjects of special study offered by the candidates.*

### History.

PAPER I—(International Law and Politics).

HALL : Treatise on International Law.

GETTEL : Introduction to Political Science.

DE BURGH : Legacy of Greece and Rome.

HAMMOND : Comparative Politics.

PAPER II—(Subject chosen for the examination of 1919-'23 : England from 1865 to 1885).

H. PAUL : History of M. England, Vols. 3 and 4.

MORLEY : Life of Gladstone. Bks. 5-8.

Cambridge Modern History, Vol. XII Ch. 2-4 and 14-16.

PAPER III—(A period of cultural history, or a select personage. Subject chosen for the examination of 1919-'23 :—Periclean Greece).

HOLM : History of Greece, Vol. 2.

THUCYDIDES : History, tr. by Dale, 2 Vols. (G. Bell).

GREENIDGE : A Handbook of Greek Constitutional History (relevant chapters only.)

W. FOWLER : City State of the Greeks and Romans (relevant chapters only).

MAHAFFY : Social Life in Greece.

MAHAFFY : History of Classical Greek Literature,  
2 Vols. (relevant chapters only).

G. MURRAY : Euripides and His Age (Home  
University).

PAPER IV—

An essay on any subject included in the course.

PAPERS V-VII.

A. Group.

(i) (Ancient Hindu India).

RAPSON : Indian Coins.

SCHOFF : Periplus.

MCCRINDLE : Megasthenes and Arian.

SHAMA SHASTRI : Artha Shastra, English .

MACDONELL : History of Samskrit Literature.

K. EGI : Rig Veda.

FLEET : Gupta Inscriptions (*Corpus Inscrip.  
Indic.* Vol. III).

[The student is expected to possess an up-to-date  
knowledge of the Ancient Geography of  
India].

(ii) (The Buddhistic World).

KERN : Manual of Indian Buddhism.

BUHLER : Indian Sect of Jainas.

BEAL : Buddhist Records of the Western  
World, 2 vols.

Asoka's inscriptions as in *Epigraphia Indica*,  
Vol. II.

GILES : Civilization of China (Home University).

(iii) (The Ancient East).

HALL : Ancient History of the Near East.

BUDGE : Egyptian Religion.

MASPERO : Art in Egypt (Heinemann).

[The student should consult L. W. King's  
History of Sumer and Akad.

„ „ Babylonia.



BUDGE: History of Egypt.

JASTROW: Civilization of Babylonia and Assyria.

PAPERS V-VII.

**B. Group,**

(i) (Mediaeval India).

ELLIOTT AND DAWSON: Vols. 2-4.

J. N. SARKAR: History of Aurangzib.

TOD: Rajasthan, Vol. I. (Sketch of the Feudal System and Annals of Mewar).

V. A. SMITH: Akbar the Great Moghal.

HAIG: Historic Landmarks of the Deccan (Pioneer Press).

GRANT DUFF: History of the Mahrattas, Vols. 1 and 2, Ch. 1-7 (or, to the death of Madhav Rao, 1772.)

(ii) (The Islamic World outside India).

MUIR: The Caliphate. New ed., by Weir.

Cambridge Mediaeval History. Vol. II. Ch. 10-12

LANE POOLE: History of Egypt under the Arabs (Methuen).

LANE POOLE: Moors in Spain (Story of Nations.)

(iii) (Mediaeval Europe).

ADAM: Civilization.

Bryce: Holy Roman Empire.

E. JENKS: Law and Politics in the Middle Ages (Murray).

SEIGNBOS: Mediaeval Civilization.

Recommended for Consultation: First three volumes of the periods of the European History edited by Hassal.

PAPERS V-VII.

**C. Group.**

(i) (British India, a select period; from Cornwallis to Wellesley).

Fifth Report, ed. by Firminger, Vol. I.

M. M. D. L. T.: History of Haidar Naik and Tipu Sultan.

S. OWEN : Selections from Wellesley's Despatches  
Do. : Selections from Wellington's Indian  
Despatches.

DUFF : History of the Mahrattas, Vol. III. Ch.  
3-15.

MILL AND WILSON : History of India, Bk. VI, being  
Vols. 5 and 6 of the Fourth Edition.

(ii) (India under the Crown).

A. RANGASWAMI AIYANGAR : Indian Constitu-  
tion.

P. MUKERJI : Indian Constitutional Documents.  
[And other books to be announced later.]

(iii) (Economic History of India, from 1500 A. D.)

MACPHERSON : History of European Com-  
merce with India.

BLOCHMAN AND JARRETT : Ain-i-Akbari, Vols.  
1 and 2.

TAVERNIER : Travels, tr. by Ball.

J. N. SARKAR : India of Aurangzeb : Statistics,  
Topography and Roads.

BADEN POWELL : Land Revenue in British India.

A Critical Study of Dutt's Famines in India.

R. C. DUTT : Economic History of British India.  
2 Vols.

Moral and Material Progress. Decennial Reports,  
1901 and 1911.

The candidate may offer ANY THREE of the above  
seven papers at the Previous, and THE OTHER  
FOUR at the Final examination. No exchange of  
papers between Groups A, B and C is allowed.

## Political Economy and Political Philosophy.

PREVIOUS (1 PAPERS).

PAPER I. General Economics.

Books recommended :

MARSHALL : Principles of Economics.

TAUSSIG : Principles of Political Economy.

**KEYNES:** Scope and Method of Political Economy.

**CARVER:** Distribution of Wealth.

**CLARK:** Essentials of Economic Theory.

**PAPER II. Economic History and History of Economic Thought.**

(Students will be expected to show knowledge of the general history of the 19th century, as outlined in such an elementary book as Robinson's Development of Europe, Vol. II.)

Books recommended :—

**MEREDITH:** Economic History of England.

**GIBBINS:** History of European Commerce in the 19th century.

**ASHLEY:** Modern Tariff History.

**TAUSSIG:** Tariff History of the United States.

**CHOJMELY:** Protection in Canada and Australia.

**R. C. DUTT:** India under Early British Rule and India in the Victorian Age.

**GIDE AND RIST:** History of Economic Doctrines.

**HANEY:** History of Economic Thought.

**PAPER III. Principles and History of Political Philosophy.**

**BLUNTSCHLI:** Theory of the State.

**GREEN:** Lectures on Political Obligation.

**JETHRO BROWN:** Underlying Principles of Modern Legislation.

**DUNNING:** History of Political Theories, 2 vols.

**E. BARKER:** Political Thought from Spencer to to-day.

**RANGASWAMI IYENGER:** Some Aspects of Ancient Indian Polity.

**PAPER IV. Essay on some Economic or Political subject.**

# FINAL (3 PAPERS).

## EITHER GROUP A. Economics.

PAPER V. Money, Banking, Prices and Finance, with special reference to India.

CONANT : Principles of Money and Banking.

FISHER : Purchasing Power of Money.

WITHER : Money Changing.

BASTABLE : Public Finance.

LAYTON : Introduction to the Study of Prices.

DATTA : Report on High Prices in India.

Chamberlain Commission Report on Indian Currency.

Indian Financial Statements, from 1906-1917.

PAPER VI. A special Indian Economic Problem to be studied in greater detail, *e.g.*—

A. Co-operation.

B. The Problem of Indian Manufactures.

C. Indian Agriculture.

D. Transport (including Shipping).

E. Famines.

Note.—The books to be studied for this paper will be announced from time to time, according to the subject which is selected by the University Professor for a particular year.

PAPER VII. *Either* The Theory and Practice of Statistics.

Books recommended :—

BOWLEY : Elements of Statistics.

YULE : Introduction to the Theory of Statistics.

GIFFEN : Economic Inquiries and Studies, 2 vols.  
Or Social and Labour Problems.

Books recommended :—

Rowntree : Poverty.

S. B. WEBB : Public Organisation of the Labour Market.

WEBB : Industrial Democracy.

GRAHAM : Socialism, New and Old.

BUSHILL : Profit Sharing and Labour Questions.

SCHLOSS : Methods of Industrial Remuneration.

PIGOU : Unemployment.

### OR GROUP B. POLITICAL PHILOSOPHY.

PAPER V. Constitutional organisation of the British Empire, the Self-Government Dominions and India.

Books recommended :

DICEY : Law of the Constitution.

LUCAS : Historical Geography of the British Colonies.

KEITH : Responsible Government in the Dominions.

BRAND : Union of South Africa.

CURTIS : The Problems of the Commonwealth.

DURHAM : Report on Canadian Self-Government.

ILBERT : Government of India.

LEE WARNER : Native States of India.

Report of the last Imperial Conference.

PAPER VI. International law, with reference to Political and Economic institutions.

Books recommended :—

HALL : Treatise on International Law.

WESTLAKE : Principles of International Law.

BOSANQUET : International Ideals.

HIGGINS : Hague Peace Conference.

F. E. SMITH : International Law.

PAPER VII. *Either* Comparative Study of Social and Political Institutions.

MAIN : Ancient Law (Pollock's Edition).

COULANGE : Ancient City.

FISHER : Bonapartism.

CARVER : Sociology and Social Progress.

GIDDINGS : Democracy and Empire.

KIDD : Social Evolution.

RISLEY : Census Report for India, 1901.

**Or Colonial and Local Government.**

**REINSCH:** Colonial Government and Administration.

**LEWIS:** Government of Dependencies.

**FAIRLIE:** Municipal Administration.

**GOODNOW:** City Government in U. S. A.

**SHAW:** Municipal Government in Continental Europe.

**P. ASHLEY:** English Local Government.

**DAWSON:** Municipal Life and Government in Germany.

## Mathematics.

(PREVIOUS).

The Examination shall consist of FOUR papers, each of three hours' duration.

**I. (a) Integral Calculus:—**

Definite Integrals, Multiple Integrals, including Green's Theorem and Dirichlet's Theorem, Line and Surface Integrals, and use of Fourier's series.

**(b) Differential Calculus:—**

Maxima and minima of functions, of two or more independent variables, multiple points, curve tracing, change of variables and Jacobians. Edward's Differential Calculus and Frost's Curve Tracing are recommended.

**II. (a) Solid Geometry, as in Bell's Geometry of Three Dimensions.**

**(b) Differential Equations, as in Murray's Differential Equation, or the corresponding parts of Forsyth's Differential Equations.**

**III. Statics:—**

Forces in three dimensions, the principle of work, centre of gravity, strings, attractions and potentials of rods, discs, spheres and spherical shells, Laplace's, Poisson's and Gauss's Theorems.

Routh's Statics and Loney's Statics are recommended.

IV. (a) Dynamics of a Particle, as in Loney's "Dynamics of a Particle and of Rigid Bodies," Chapters I-X.

(b) Rigid Dynamics, limited to two dimensions, including Lagrange's Equations and their applications to easy problems.

Routh's Elementary Treatise on Rigid Dynamics, Chapters I-IV.

Or

Loney's "Dynamics of a Particle and of Rigid Bodies," Chapters XI-XV, XVII-XIX, are recommended.

(FINAL).

The examination shall consist of FOUR papers, each of three hours' duration. Candidates are required to offer Group A and ONE of the Groups B. and C.

#### GROUP A.

(1) Algebra, Trigonometry and Theory of Equations, as in Chrystal's Algebra, Part II, Chapter XXXI, Chapter XXXV, Arts. 1-18.

Hobson's Trigonometry, Chapters XIII-XVIII.

Burnside and Panton's Theory of Equations, Part I, and Chapter XIII of Part II.

(2) Analytical Conics and Differential Equations, as in Salmon's Conic Sections, Chapters IV, IX, XIV, XIX, and

Forsyth's Differential Equations, excluding general linear equations with variable co-efficients, solution by definite Integrals, Jacobi's method and partial differential equations of the second and higher orders, with variable co-efficients.

#### GROUP B.

(1) Astronomy and Lunar Theory. Godfray's Astronomy and Moulton's Celestial Mechanics are recommended.

(2) Hydrostatics and Hydrodynamics, as in Besant and Ramsay's Hydromechanics, Part I, excluding Chapters IX and X,

and

Basset's Elementary Hydrodynamics, Chapters I, II, III, IV, VI, VII.

#### GROUP C.

(1) Theory of Aggregates and Theory of Functions, as in Forsyth's Theory of Functions of a Complex Variable, Chapters I-IV.

Hobson's Theory of Functions of a Real Variable, Articles 1-40, 45, 56, 77, 78, 164-184, 200-204, 250-254, 424 and Notes A and B of Dr. Ganesh Prasad's Differential Calculus.

(2) Non-Euclidean Geometry and Differential Geometry, as in Coolidge's Non-Euclidean Geometry and Eisenhart's Differential Geometry.

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### M. Sc. EXAMINATION.

#### Mathematics.

(Same as for the M. A. Examination).

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#### Chemistry.

##### (A) PREVIOUS.

There will be two papers, each of three hours' duration. There will also be a *practical examination*.

##### *Theoretical.*

The subjects of examination will be :—

Organic Chemistry.

Inorganic Chemistry.

The history of the atomic theory and atomic weight determinations.

Physical Chemistry.



*Practical.*

Complex Inorganic Analysis (Qualitative).

Volumetric and Gravimetric Analysis.

Complete analysis of at least *two Indian minerals of economic importance* and of some of the common alloys.

Identification of common organic substances.

The following experiments in Physical Chemistry :—

*Surface tension, viscosity and transition point.*

The candidate will continue the study of the special subject taken in the B. Sc., under para 7, and may submit to the examiner his work along with samples of the substance or substances prepared, to show the progress he has made during the year. The examiner will take this into account in marking for the practical examination.

Books suggested for study and reference :—

*Theoretical.*

OSTWALD : Principles of Chemistry.

ROSCOE AND SCHOLEMMER : Inorganic Chemistry, Parts I and II.

MELLOR : Higher Mathematics for Students of Physics and Chemistry.

ARMITAGE : History of Chemistry.

WALKER : Physical Chemistry.

JONES : Elements of Physical Chemistry.

FENTON : Physical Chemistry.

BERNTHSEN : Organic Chemistry.

COHEN : Advanced Organic Chemistry.

*Practical.*

MELLOR : Quantitative Analysis.

CLOWES AND COLEMAN : Quantitative Analysis.

TREADWEL AND HALL : Analytical Chemistry.

SUTTON : Volumetric Analysis.

THORPE: Industrial Chemistry.

SUDBOROUGH: Practical Organic Chemistry.

WESTON: Identification of Organic Compounds.

SPENCER, L. J.: World's Minerals.

### (B) FINAL.

There will be FOUR papers (one Inorganic, two Organic, one Physical and one Historical Chemistry), each of three hours' duration. There will also be a *practical* examination.

The subjects of the examination will be :-

Inorganic Chemistry.

Organic Chemistry.

Physical Chemistry.

History of Chemistry.

Candidates are expected to have acquaintance with recent work connected with one of the first three branches mentioned above. They should be able to refer to, and abstract the recent chemical literature from, scientific journals.

A candidate may offer to take up translation from French, German or old Samskrit technical literature (Dictionary being allowed). The examiners will take this into consideration in deciding the result of the examination.

### PRACTICAL EXAMINATION.

Simple experiments in Physical Chemistry.

Organic analysis, Gas analysis.

Qualitative and Quantitative analysis of *any four* of important Indian minerals of economic value other than those taken up for the Previous M. Sc. Examination.

The candidate will conclude his study of the special subject, selected under para. 7 of the B. Sc. Syllabus, and will submit to the examiner the whole work done by him during the four years with the

prepared samples. The examiner will take this work into account in deciding the result of the examination.

Books suggested for reference and study, in addition to those prescribed for the Previous Examination :—

RICHTER : Organic Chemistry.

EMIL FISCHER : Organic Preparations.

STEWART : Recent Advances in Organic Chemistry.

MAYER : History of Chemistry.

WANT'S HOFF : Lectures on Theoretical and Physical Chemistry.

WERNER : New Ideas in Inorganic Chemistry.

NERNST : Theoretical Chemistry.

P. C. ROY : History of Hindu Chemistry, Vol. I.

STEWART : Recent Advances in Physical and Inorganic Chemistry.

THORPE : Industrial Chemistry.

ROGERS : Industrial Chemistry.

Chemical Society Annual Reports.

Papers in current Scientific Journals.

LASSER COHN : Laboratory Manual of Organic Chemistry.

MEYER TINGLE : Determination of Radicals in Carbon Compounds.

FINDLAY : Practical Physical Chemistry.

FRANCIS GREY : Practical Physical Chemistry.

### **Physics.**

#### **(A) PREVIOUS.**

The Subjects of Examination are :—

*Properties of Matter.*

*Heat.*

*Sound.*

A candidate shall be required to have a sound knowledge of the experimental side of the above

subjects, and also such knowledge of the theoretical side of each as may be obtained by the applications of the Calculus and Differential Equations. In addition to the above, the candidate shall be required to have a *detailed advanced knowledge, experimental and theoretical, of one special subject*. The candidate may *either* select any subject from the following list *or* take up any other subject, provided that, in the latter case, he applies at least six months before the date of the examination and the subject is approved by the Syndicate on the recommendation of the Board of Studies in Physics.

#### SPECIAL SUBJECTS.

“Elasticity and Strength of Materials.”

“General Theory of Vibrations, with Illustrations.”

“Wave-motion in Fluids.”

“Advanced Thermodynamics and Laws of Radiation.”

“Kinetic Theory of Gases and Gas Laws.”

“Heat Conduction and Radiation.”

“Dynamical Theory of Sound.”

“Thermometry and Pyrometry.”

There shall be THREE papers, each of three hours' duration :—

(i) Properties of Matter and Sound.

(ii) Heat.

(iii) Special subject selected by the candidate.

The scope of the examination is approximately indicated by the following text-books:—

POYNTING AND THOMSON: Properties of Matter.

PRESTON: Theory of Heat.

PLANK: Thermodynamics.

BARTON: Sound.

For the *Special* subject, students are required to consult their Professors as to a suitable course of

reading, which should include the study of Original Papers and recent advances, as described in Standard Scientific Journals.

There shall be a Practical Examination in Physics, in the subjects offered by the candidate.

Books recommended :—

WATSON : Text-book of Practical Physics.

KOHLRAUSCH : Physical Measurements.

(B) FINAL.

The Subjects of the Examination are :—

*Light.*

*Electricity.*

*Magnetism.*

A candidate shall be required to have a sound knowledge of the experimental side of the above subjects, and also such knowledge of the theoretical side of each as may be obtained by the applications of the Calculus and Differential equations. In addition to the above, the candidate shall be required to have a *detailed advanced knowledge, experimental and theoretical, of one special subject.* The candidate may *either* select any subject from the following list *or* take up any other subject, provided that, in the latter case, he applies at least six months before the date of the examination and the subject is approved by the Syndicate on the recommendation of the Board of Studies in Physics.

SPECIAL SUBJECTS.

“ Electromagnetic Theory of Light.”

“ Geometrical Optics and Theory of Optical Instruments.”

“ Spectroscopy.”

“ Theory of Electricity and Magnetism.”

“ Electrolysis and Theory of Solutions.”

“ Radio-activity and the Electron Theory.”

There shall be THREE papers, each of three hours' duration :—

- i—Light.
- ii—Electricity and Magnetism.
- iii—Special subject selected by the candidate.

The scope of the examination is approximately indicated by the following text-books :—

PRESTON : Theory of Light.

WOOD : Physical Optics.

DRUDE : Optics.

FOSTER, ATKINSON AND PORTER : Electricity and Magnetism.

CAMPBELL : Modern Electrical Theory.

STARLING : Electricity and Magnetism.

For the *Special* subject, students are required to consult their Professors as to a suitable course of reading, which should include the study of Original Papers and recent advances, as described in Standard Scientific Journals.

The candidates shall also present a *Thesis*, consisting of a record (published or not) of advanced work or of an essay on some scientific questions of importance involving criticism or historical research.

There shall be a Practical Examination in Physics, in the subjects offered by the candidate.

Books recommended :—

WATSON : Text-Book of Practical Physics.

KOHLRAUSCH : Physical Measurements.

MANN : Manual of Advanced Optics.

M. Sc. students will be required to show that they possess a practical acquaintance with the handling of laboratory machines, *e. g.*, Laboratory Dynamos and Motors, Oil and Petrol Engines, Charging Accumulators, Projection Lantern, etc.

## **Zoology.**

### **(PREVIOUS).**

The Structure, Development, Bionomics, and Distribution in Space and Time of Typical Representatives and other examples illustrative of the general characters of the principal sub-divisions of each Phylum of the Animal Kingdom.

The standard of the examination is approximately indicated by such text-books as Parker and Haswell: "A Text-book of Zoology," 2nd Edition, 2 Vols., and Sedgwick's "Student's Text-book of Zoology," 3 vols.

There will be THREE papers, as mentioned below, each of three hours' duration :-

Paper I will deal with the Comparative Anatomy and Embryology of Non-chordate Groups.

Paper II will deal with the Comparative Anatomy and Embryology of Chordate.

Paper III will deal with the element of Palæontology and Geographical Distribution of Animals.

### **PRACTICAL WORK.**

There will also be a practical test.

All aspects of the subject to be studied, as much as possible, from a practical standpoint.

### **(FINAL).**

The Subjects for Examination shall be—

(a) The general principles of Biology, comprising the various theories of evolution and the subjects of variation, adaptation, inheritance and sex.

(b) A detailed knowledge of some subject or group, to be announced at least one year previous to the date of the examination.

Division (a) shall consist of two papers, each of three hours' duration :—

Paper 1 shall comprise the history and general principles of Biology, including the facts and theories

of evolution, and the subject of variation, adaptation, selection, isolation, reversion, etc.

Paper 2 shall comprise the facts and theories of heredity, sex, experimental morphology and embryology, bionometrics, etc.

Division (b) shall also consist of two papers (papers 3 and 4), dealing with the specified subject or group selected. Groups selected for papers 3 and 4 are the following:—

A. Platyhelminthes and Annelida

or

B. Freshwater Pisces

or

C. Vertebrate Embryology.

Each paper shall be of three hours' duration, and there shall also be a practical examination. (Examiners appointed to set papers 3 and 4 will collaborate, to obviate overlapping of questions in the 2 papers).

#### PRACTICAL WORK.

A. selected subject shall be studied, as much as possible, from the practical standpoint. A selected group shall be studied primarily from the local fauna available in the United Provinces, but also from other examples of important types.

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#### Mineralogy.

(Courses not prescribed).

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#### Geology.

(Courses not prescribed).

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#### Botany.

(PREVIOUS).

A knowledge of the structure, development and reproduction of the various groups of the Crypto-



gams and Gymnosperms, including the more important extinct types and their bearing on Phylogenetic relationships.

There will be THREE papers, and a practical examination. The *first* paper will deal with Algæ and Fungi, the *second* with Bryophyta and Pteridophyta, and the *third* with the Gymnosperms.

(FINAL).

The subjects for examination shall be as indicated below, and will be divided into 4 papers, as indicated by the numbers. In addition, there shall be a practical examination.

- A. (1) Angiosperms.
- (2) Ecology and Physiology.
- (3) Evolution, Variation and Heredity.

B. (4) A detailed knowledge of some subject or group (to be announced at least one year previous to the date of Examination).

The following books are suggested for both Previous and Final : -

STEASBURGHER : Text-book of Botany.

SCHIMPER : Plant Geography.

COULTER AND CHAMBERLAIN : Gymnosperms.

WILLIS : Flowering Plants and Ferns.

LOCK : Heredity, Variation and Evolution.

JOSE : Lectures on Plant Physiology.

DARWIN AND ACTON : Practical Physiology of Plants.

CAMPBELL : Mosses and Ferns.

WEST : Algæ.

BUTLER : Fungi and Diseases in Plants.

SCOTT : Studies in Fossil Botany.

**EXAMINATION FOR THE DEGREE OF  
LICENTIATE OF TEACHING.**

(Same as in 1919).

## **B. Sc. (ENGINEERING).**

### **(A) Intermediate (Engineering), Part I.**

There shall be NINE papers, as follows :--

Paper I--Pure Mathematics, including Elementary Conics and Calculus.

Paper II--Applied Mathematics, including Mechanics and Practical Geometry.

Paper III--Engineering Physics.

Do. IV--Engineering Chemistry.

Do. V--Building.

Do. VI--Surveying.

Do. VII--Metallurgy.

Do. VIII--Engineering.

Do. IX--Mechanical Drawing

Each paper will be of 3 hours' duration with the exception of the paper on Mechanical Drawing, which will be of four hours' duration.

Syllabus of classes is as follows : -

### **Mathematics.**

#### **FIRST YEAR.**

A brief revision of the Intermediate Science Syllabus, with a more advanced treatment of certain parts, will precede the following :--

The study of the graphs of the functions  $ax^n$ ,  $ae^{bx}$ ,  $a \sin (nx+b)$ , and of combinations of these. Graphical solution of equations, with numerical coefficients. Maxima and Minima. Slope of a curve. Graph of slope function. Determination of the equation of a given curve.

Calculus : Differential.—Limits, Differential coefficients. Rules of differentiation. Geometrical and Mechanical illustrations. Successive differentiation. Study of curves. Convexity and concavity. Maxima and Minima. Points of inflexion, etc.

**Calculus : Integral.**—Elementary forms of Integration. Areas. Approximations. Surfaces and Volumes of Solids. Centres of Inertia. Moments of Inertia. Dynamical applications.

**Co-ordinate Geometry :** Elementary introduction.

**Two Dimensions.**—Cartesian and Polar Co-ordinates. Equations and properties of the Straight Line, Circle, Parabola, Ellipse and Hyperbola.

**Three Dimensions.**—Position of a point in space. Direction. Cosines of a line.

**Mechanics : Theoretical.**—Velocity, acceleration, relative velocity. Projectiles. Mass. Momentum. Force. Motion of Simple Systems. Units. Equilibrium of forces at a point. Resolution and composition of forces. Application to practical problems. Parallel Forces. Stable and unstable equilibrium.

Uniform motion in a circle. Centrifugal force. Small oscillations of a simple pendulum. Determination of "g." Laws of friction. Simple machines, with and without friction. Work. Potential and Kinetic Energy. Principle of Energy applied to simple problems. Elementary Hydrostatics. Pressure of a fluid. Archimedes' Principle. Densities. Boyles' Law. Transmission of pressure through a fluid.

**Mechanics : Practical.**—Construction and use of a Vernier. Vernier Callipers. Screw Gauge. Spherometer. Acceleration. Falling plate. Sphere on inclined railway. Projectile. Atwood's Machine: Impact. Flywheels; Radius of Gyration, and Moment of Inertia: Centrifugal Force. Harmonic Motion. Pendulums. Equilibrium of Co-planer Forces. Inclined Plane. Parallel Forces. Wheel and Axle. Simple machines. Hooke's Law. Young's Modulus by stretching of a wire and by flexure of beams. Specific gravities:—Hydrostatic balance. Specific gravity bottle.

Nicholson's Hydrometer. Common Hydrometer. Balancing of liquid columns. Barometer. Torricelli's Theorem.

**PRACTICAL GEOMETRY:** Construction of scales. Similar figures. Reduction and enlargement of figures. Construction of ellipse, hyperbola, parabola, cycloidal curves, involutes, and spirals. Envelopes. Similar curves.

General problems on points, lines and planes, with applications. Trihedral angles. Projection of regular solids in any position. Plane sections of regular solids in any position. Auxiliary plans and elevations.

## **Engineering and Mechanical Drawing.**

### **FIRST YEAR.**

#### **A. ENGINEERING.**

The object of the course is to prepare the students for the more advanced theoretical lectures that are to follow, to give them that familiarity with mechanical details which is essential in order that the course in mechanical drawing may be carried out, and to give them some acquaintance with engines and boilers, and with practical problems.

In order that students may, from the beginning, learn to correlate their scientific and mathematical studies with engineering problems, they will in this course be taught to make simple calculations, with reference to Indicated Horse Power, Brake Horse Power, Electrical Horse Power, and Boiler Horse Power.

The fundamental ideas concerning Velocity, Acceleration, Mass, Weight, Force and Energy, will be very carefully explained from an engineering point of view, and a large number of problems worked out by the

students. These problems will be of a practical nature, and such as are continually occurring in every day engineering practice.

As far as possible, students in this class will be made to become familiar with parts of engines and machines by actual handling and manipulation, and great importance will be attached to sketching. Students are taught to make dimensioned sketches of important engine details.

A Sketch-book, 11" × 8", containing about 90 pages of thick unruled paper, is required; and, in this book, students must keep all notes and sketches, connected with mechanical drawing, neatly entered in pencil. Clear and well-proportioned freehand sketches are required.

These sketches will first be copied from wall diagrams or from simple blackboard sketches, until the students have some idea of the way in which these things are represented by practical men. Then, fully dimensioned sketches must be made of the actual things, or of carefully constructed full-size models.

The models should be handled by the students, and carefully measured by means of callipers and foot-rule. The sketches must be "practical," *i.e.*, must contain all the information that is required in order that the thing may be made. All sketches must be entirely freehand, and executed without the aid of squared paper.

The following details must be carefully studied and their utility realised:—

- (1) Different kinds of bolts, nuts and rivets.
- (2) Different rolled sections, angle, T, and channel iron.
- (3) Keys, Cotters, Split pins, Taper pins.
- (4) Screw-threads:—Square, V, and Buttruss.

- (5) Different methods of locking nuts.
- (6) Whitworth standards for bolts and screws.

Also:—

All the parts of a simple steam engine and boiler.

Students must be able to name these parts without hesitation, to explain, in an elementary way, the function of each part, and to sketch them clearly from memory.

#### COURSE OF INSTRUCTION.

How to point pencils for sketching and for drawing. The use of drawing instruments, dividers, compasses, T squares, set squares, drawing pens, and of the scales required for mechanical drawing. The use of these instruments, as well as the printing required, will be taught incidentally as the course proceeds. All printing, including the figured dimensions, to be very clear and distinct.

ACCURATE CONSTRUCTION OF THE FOLLOWING SCALES:—Three-quarters, half, and one-quarter full size, the smallest scale graduation in each, corresponding to  $\frac{1}{8}$  of an inch. A diagonal scale to show eighths and sixty-fourths of an inch.

SIMPLE PROJECTION:—Projection of lines, simple plane figures and solids. Plane sections of a cylinder and of a cone.

THE CONSTRUCTION OF A SQUARE THREADED SCREW and a section through the corresponding nut. "Double threaded" screws.

Construction of a large V threaded screw. Standard screw. Threads, and the conventional methods of representing them.

Rivets, bolts, studs, nuts, and set screws. Keys and key ways, feathers. Flange and muff couplings. Design of a cast iron flange for a shaft. Design of the flange, cover, and studs for a small steam engine

cylinder. Design for, at least, one type of stuffing box.

Design of simple rivetted joints (lap and butt):--  
(a) for a tie bar (b) for a boiler.

Design of a simple bearing for a shaft.

As large a number of examples as possible to be worked out and drawn to scale. The dimensions to be always calculated wherever possible, and not merely copied.

Students are expected to become practically acquainted with the things they draw. It is extremely important that students should bear in mind that the purpose of a mechanical drawing is to represent an object, so that that object can be made. Pretty pictures are not required, but clear and accurate drawings, from which all the dimensions and materials used can be easily determined. In other words, "working" drawings are required, and no credit will be given for drawings that are not "working" drawings, however beautifully they may be finished. Complicated and difficult drawings are not required in this course, but extreme accuracy is essential, and all calculations must be shown.

### *B. SURVEYING AND PLOTTING.*

Lectures and Plotting—60 hours.

Field Work—30 hours.

Scales and systems of measurement connected with surveying.

Conventional signs used when plotting. Areas, prisms, prismoids, and pyramids. Applications of Geometry and Trigonometry.

Enlarging and reducing maps. Plotting from field notes.

Plotting traverse by protractors, chords, and rectangular co-ordinates.

The Chain, and methods of carrying out chain survey.

Ranging rods, offsets, cross-staff, and optical square.

Prismatic compass. The plane table.

Levelling, use and adjustment of the Y level, the Dumpy level, and, at least, one other form of spirit level.

Flying levels. Bench marks. Check levelling. Keeping the level book.

Reduction and check of level readings.

The Theodolite, its use in measuring angles, in azimuth and altitude, open or closed traverse, and railway curves.

## Building and Building Materials.

### FIRST YEAR.

Timber : Characteristic properties and means of preservation of timber used in construction. Defects in timber and characteristics of good timber.

Woodwork :—Joints used in woodwork.

Paints and Varnishes.

Bricks :—Characteristics of good bricks. Standard size of bricks.

Brick-work :—Bonds. English bonds. Damp-proof courses. Cornices.

Stone-work :—Joints. Varieties of walling.

Limes, Cements, Mortars :—Different kinds of sand, mortar, lime, and cement; preparation and mixing of mortars; strength of mortar; precautions in using.

Concrete :—The matrix, the aggregate, the proportion of ingredients, mixing and laying, use of concrete, re-inforced concrete.

Building :—Selection of site, foundations, preparation of foundation bed. Benching out. Breadth



and form of foundation. Earth filling. Plinth. Thickness of wall.

Openings and arches in wall. Fixing doors and window frame.

Floors:—Brick on edge, stone, patent stone, terrace.

Roofs:—Trusses of wood and iron. Coverings. Terrace roofs.

Drawing:—Of a simple building from measurement.

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## **Engineering Chemistry.**

### **FIRST YEAR.**

The object of this course, as of the "Engineering Metallurgy" course, is to supply rudimentary information concerning the chemical properties of the materials commonly employed in Building Construction and Equipment, and in Machinery construction and Operation, so that these materials might be used more intelligently, and, therefore, to better advantage. The materials will not be considered from the manufacturer's standpoint, but from that of the user. It is not possible to divorce entirely the discussion of the properties of any material from the discussion of the methods of its manufacture, but the latter will not be emphasized or presented in detail. This course supplements, and is supplemented by, the Engineering Metallurgy course, and the division has been made chiefly for reasons of convenience. Previous knowledge of elementary general Chemistry will be assumed.

#### **(1) A BRIEF RECAPITULATION OF THE FOLLOWING:—**

Chemical and Physical changes. Chemical compounds and mechanical mixtures. Chemical affinity. Conditions of chemical action. Oxygen, Hydrogen, and Water. Oxidation and reduction. Combustion

Thermo-chemistry. Combining or equivalent weights. The atomic theory. Multiple proportions of atomic weights. Molecules and molecular weights. Valence. Radicals. Chemical equations and calculations. Metallic and non-metallic elements. Acids, bases, and salts. Carbon. Organic Chemistry. Nitrogen. Sulphur. Phosphorus. Silicon and Silicates. Calcium, Magnesium and Iron.

## (2) WATER FOR STEAM GENERATION.

Sources. Impurities commonly present, and their properties. Temporary and Permanent Hardness. Effect of impurities. Production of scale, corrosion, and foaming, and conditions governing them. Treatment of boiler waters. Cold-water softening. Hot-water softening. "Boiler compounds." Select methods of analysis of water and of boiler-scale. Calculations of chemicals required for softening.

## (3) FUELS.

Principles of Combustion. Conditions necessary for complete combustion. Smoke production. Surface combustion. Calorific power and calorific intensity of fuels. Their calculation and experimental determination (calorimetry and pyrometry). Solid fuels—wood, charcoal, coal and coke. Spontaneous combustion in stored coal. Liquid fuels—the petroleum products. Gaseous fuels—producer gas, water gas, blast furnace gas, coal-gas, oil-gas. Thermal efficiency. Sampling and chemical analysis of solid and gaseous fuels, and of flue gases.

## (4) REFRACTORY MATERIALS.

General requirements. Acid, basic and neutral refractories.

## (5) BUILDING STONES.

Durability, Discoloration and Fire-resistance. Stones of igneous origin—granites and traps. Stones

of sedimentary origin—slates, sand-stones, limestones and marbles.

(6) LIME AND GYPSUM PRODUCTS.

Lime—its manufacture and properties. Slaking. Hydraulic limes. Lime-sand mortar. Gypsum Products—Plaster of Paris, Stucco, Cement Plaster, Flooring Plaster. Hard Finish Plaster.

(7) PORTLAND CEMENT.

Manufacture and Composition. Setting and hardening. The Colloidal theory. Rate of hydration and development of strength. Retardation of set by gypsum, and by aeration. Effect of fineness and other factors on setting and hardening. Action of destructive agents. Testing of cement. Concrete.

(8) CLAY AND CLAY PRODUCTS.

Sources, composition and properties of Clay. Clay for bricks. Brick-making. Terra-cotta. Tiles.

(9) PAINTS AND VARNISHES.

Paint materials—Paint pigments. Paint and Varnish Oils. Examination of oils and fats. The Drying oils and Driers. Solvents and Diluents. Paints—General requirements; single pigment and composite paints, paints for metals, corrosive and anti-corrosive pigments. The Varnishes. The Varnish resins. Spirit varnishes. Lacquers. Japans and Enamels. Oil varnishes. Wood stains. Wood fillers.

(10) LUBRICANTS.

Fundamental requirements. The mineral lubricating oils—destructively distilled and steam distilled. The fatty oils. Greases. Examination of lubricants. Selection of lubricants. Cooling liquids, and lubricants for cutting tools.

**(11) GLUE.**

Colloidal state of glue and gelatine. Commercial forms and grades of glue. Glue testing. Selection of glue for wood joints. Preparation of glue solutions for use.

**(12) RUBBER.**

Source and treatment of crude rubber. Vulcanising. Other materials used in rubber. Properties of soft vulcanised rubber. Ebonite or hard rubber. Synthetic or artificial rubber. Rubber substitutes.

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**Engineering Metallurgy.**

The object of this course, as of the "Engineering Chemistry" course, is to supply rudimentary information concerning the chemical and metallurgical properties of the materials commonly employed in Building Construction and Equipment, and in Machinery Construction and Operation, so that these materials might be used more intelligently, and, therefore, to better advantage. The material will not be considered from the manufacturer's standpoint, but from that of the user. It is not possible to divorce entirely the discussion of the properties of any material from the discussion of the methods of its manufacture, but the latter will not be emphasized or presented in detail. This course supplements, and is supplemented by, the Engineering Chemistry course, and the division has been made chiefly for reasons of convenience. Previous knowledge of elementary general Chemistry will be assumed.

**(1) GENERAL.**

General discussion of the nature and objects of metallurgical processes. Chief physical properties of metals and alloys. General properties of fluxes and slags.

## (2) IRON AND STEEL.

Production of pig iron. Cast iron. The solution theory of cast iron. The effects of silicon, sulphur, phosphorus and manganese on cast iron. Composition and properties of cast iron. Malleable cast iron. Wrought iron. Wrought iron compared with low-carbon steel. Carbon steel, Bessemer steel. Open-hearth steel. The acid process. The basic process. Cement or blister steel. Crucible steel. Electric refining of steel. Comparison of steels. Constitution of steel. The constituents of hardened and tempered steels. Characteristics of the constituents of steels. Processes of hardening and tempering. Case hardening. Alloy steels—their structure and properties. Types of alloy steels. Self-hardening steels. High-speed tool steel. Corrosion of iron and steel. Composition bulk, and weight of rust. Theories of corrosion—the carbonic acid theory and the electrolytic theory. Factors affecting the rate of corrosion. Protection of iron and steel from corrosion.

## (3) THE NON-FERROUS METALS.

The chief properties and uses of the following metals, together with very brief accounts of the processes of their manufacture:—

Aluminium. Copper. Zinc. Tin. Lead. Bismuth. Antimony. Nickel. Manganese.

## (4) THE NON-FERROUS ALLOYS.

Solid solutions. Eutectics. Liquation. Reasons for alloying metals. The preparation of alloys. The crystalline structure of alloys. Brass. Delta Metal. German silver. Monel metal. Bronze. Special bronzes. Bearing alloys. Type metal. Solder—composition and properties, plumber's solder, aluminium solder, care of solder. The use of fluxes in soldering. Cleaning metal surfaces.

**(5) FOUNDRY SANDS.**

Moulding sands—their grades, cohesiveness, refractoriness, texture, permeability and porosity, durability, chemical composition and mineral composition. Core sands. Parting sand. Foundry facings. Core binders—dry and liquid.

**Physics.****FIRST YEAR.**

A brief revision of the subjects dealt with in the Intermediate Science Course, with a more advanced treatment of certain parts, especially with reference to practical applications.

Heat:—Construction and calibration of thermometers. The gas scale. Quantity of heat. Specific heats of solids, liquids, and gases. Calorimetry. Change of state. Latent heat of fusion and evaporation. Vapour pressure and its variation. Transfer of heat. Conduction, convection, and radiation. General behaviour of vapours. Saturation pressures and change of boiling points. Freezing curve for salt solutions. Freezing curve for alloys. The eutectic line. Determination of the Mechanical Equivalent of heat. The ideal heat engine. Thermal efficiency.

Magnetism:—Properties of Magnets. Magnetic induction. Magnetic field. Methods of making magnets. Laws of magnetic force. Units pole. Intensity of magnetic field, and of magnetization. Magnetic moment. The earth's magnetic field, direction, and intensity. Lines of force, and their properties. Definition of Gauss, Maxwell and Gilbert. Magnetic Flux.

Electricity:—Phenomena of electrified bodies. Law of charge. Conduction and insulation. Electrification by induction. Faradays' ice-pail experiment. Electrophorus. Explanation of terms. Cir-

cuit, Generator, Switch, Ampere, Absampere or Stamtampere. Ohm. Volt. E. M. F., and P. D., Watt, Joule, Series Circuit, Parallel Circuit. Electric field and Intensity. Law of Electric Force. Elementary theory of Potential. Electric Current. Direction of Current. Description of common forms of Leclanche, Bichromate, Daniell, and dry cells. Heating. Chemical and magnetic effects of current. Field of linear and circular currents. Solenoid.

Work done by an Electric Current. Joule's Law. Ohm's Law. Resistance of Wire and Conductor. Effect upon the resistance of Length, Cross-Section, Material and Temperature.

Description of Sine, Tangent, Astatic and Mirror Galvanometers. Ammeters, Voltmeters and Electrometers. Ohmmeter, Wattmeter, Joulemeter, Potentiometer and Kelvin's Balance.

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## **Electrical Engineering.**

### **FIRST YEAR.**

#### **EXPERIMENTS ON MAGNETISM AND ELECTRICITY.**

(1) Measurement of the Magnetic Moment of a Bar Magnet.

(2) Comparison of the Magnetic Moments of two Magnets.

(3) Measurement of the Horizontal Intensity of the Earth's Magnetism.

(4) Proof of Ohm's Law.

(5) Measurement of the strength of the Magnetic Field due to a constant current flowing round a circular coil.

(6) Measurement of High Resistance by the Substitution Method.

(7) Measurement of Very High or Insulation Resistance (Loss of Charge Method).

(8) Measurement of Low Resistance. Measuring resistance of D. C. Armatures.

(9) Measurement of Insulation Resistance of cables, appliances and installations.

(10) Variation of Resistance, with Length, Diameter and Material.

(11) Laws of Combination of Resistance in Parallel.

(12) Determination of Reactance.

(13) Experimental study of Magnetic Circuit.

## **Engineering & Mechanical Drawing.**

### **SECOND YEAR.**

#### **A. HEAT ENGINES.**

**STEAM POWER :—**General description of a steam plant. The Indicator Diagram and Indicated horse-power. Brake horse-power. Absorption and transmission dynamometers. The relation between mechanical and electrical power units. Mechanical efficiency. Thermal efficiency. The laws of Thermodynamics.

**STEAM BOILERS :—**The principal types of modern boiler. Cornish and Lancashire Boilers, with details of construction and mountings required for their safe working. The Combustion and Economy of Fuel. Chimney Draught. Forced Draught. Induced Draught. Care and management of boilers. Repair of boilers. Boiler efficiency. Furnace efficiency. Efficiency of transmission. Coal, its composition and calorific value. Liquid fuels. Experimental and analytical determination of calorific values. The adaptation of boilers to different kinds of solid and liquid fuels. Economizers and Superheaters. The feed-water and feed-pumps. Feedwater Filters. The Injector. Strength of boiler shells. Riveted joints. Strength of gussets, stays, flues, furnaces, domes, and flat



surfaces. Steam Pipes. Safety Valves. Openings in boiler shells. Board of Trade Regulations, and Lloyd's rules for survey and construction of boilers.

**STEAM ENGINES :—**Modern forms of steam engine. Cylinders and their fittings. Pistons, Piston rods and Cross-heads. Connecting Rods and Shafting. Guides, Main Frames and Bearings. The Slide Valve and its motion. Valve diagrams. The Valve diagram, with corrections for obliquity. The Valve Ellipse. The Bilgram Diagram. The relation between the Valve diagram and the Indicator diagram. The Diagram Factor. Stephenson's link motion. The Meyer Expansion Valve. The principle underlying Radial Valve Gears. The Compound Steam Engine. The Combined Diagram. The Triple Expansion Engine. The Condenser, Air Pump and Circulating Pump. Steam Exhaust and Drain Systems. The Governor and the Flywheel.

**GAS AND OIL ENGINES :—**Gaseous Fuels. Liquid Fuels. Gas Producers and Vaporizers. Suction Gas Plants. General description of a Gas Engine. Engine bed and cylinder, piston, crank and connecting rod. The Valves and the methods of operating them. The Governor and a Flywheel. Ignition systems. Starting arrangements. Cooling water. Pipe connections. Silencer. Lubrication. Foundations. Different systems of Governing.

**OIL ENGINES :—**Carburettors, Vaporizers, Oil Pumps. Different types of Oil Engines. The Four Stroke and the Two Stroke Cycle. Automobile Motors. The Humphrey Gas-Pump.

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## **B. APPLIED MECHANICS.**

### **SECOND YEAR.**

**INTRODUCTION :—**Divisions of the subject. Bibliography. Various values of important constants. Prac-

tical methods of measuring lengths, constants, areas, volumes and angles. Limit of accuracy. The manufacture and use of Gauges. Limit Gauges. Testing a Flat Surface. Screw testing. Ball Gauges. 'Inspectors' Gauges. Reference discussions. Dial Gauges. Test Indicators. The Microscopic Measuring Machine. The Tachometer. The Pressure Gauge.

**FORCE :—**The Engineers' idea of Force. The measurement of Force. Resolution of Forces. Moments of Forces. Some practical applications of Forces and Moments. Graphics. Forces represented by lines. Bows' Notation. Forces in Framed Structures. The Funicular Polygon. Moments and Centroids. Bending moment and Shearing Force diagrams.

**FORCE, MASS, AND MOTION :—**Velocity and Acceleration. Relations of Force, Mass and Motion. Engineers' Units. Impulsive Force. Angular Velocity and Acceleration. Angular Momentum. Simple Harmonic Motion. Centrifugal Force. Balancing. Governors. Graphical Solution of problems. Velocity and Acceleration. Diagrams.

**WORK, ENERGY, AND POWER :—**Work in lifting, translation, and rotation. Work represented by an Area. The Indicator Diagram. The principle of Work as applied to a Machine. The effect of Friction. The relation between the load, effort, friction, and efficiency of a Machine. Curves of Efficiency. The relation between Work, Energy, and Power. Potential and Kinetic Energy. The Kinetic Energy of a Rotating Body. The Flywheel. Power. The relation between Mechanical, Thermal, and Electrical Units of Work, Power and Energy. Loss of Power at Bearings and Journals. Power and Efficiency of Engines, Pumps, Motors, and Dynamos. Dynamics of the Steam Engine.

**FRICTION AND LUBRICATION:—**Laws, experiments, and results. Relations between the Forces acting on a Sliding Body. Efficiency of the Inclined Plane and Screw. 'Friction of Pivots and Collars. Schieles' Pivot. Tower's experiments. 'Friction of an axle. Friction Axis of a Link. Work lost in Friction in Journal Bearings. Methods of Lubricating Bearings. Pad, bath, ring and splash lubricator. Goodmen's experiments. Rolling Friction. Ball bearings. Roller bearings. Friction of Belts.

**TRANSMISSION OF MOTION AND POWER:—**Belts, Ropes, and Spur Gearing. Wheel Trains. Mechanisms peculiar to Lathes. Milling Machines. Shaping, Planing, and Slotting Machines. Bicycles and Motor Cars.

**STRENGTH AND ELASTICITY OF MATERIALS:—**Simple Strains and Stresses. Beams and Bending. Deflection of Beams. Columns and Struts. Behaviour of Materials in the Testing Machine. Torsion of Shafts.

**HYDRAULICS:—**Pressure on an immersed surface, buoyancy, density. Hydraulic Press and Jack. Hydraulic Accumulators, Lifts and Cranes. Suction, single and double acting Force Pumps. Flow of water through orifices, pipes, and channels. Water Wheels, Centrifugal Pumps, and Turbines.

### **C. PRACTICAL GEOMETRY.**

#### **SECOND YEAR.**

**INTRODUCTION:—**Scales. Slide Rule. Vernier. Computation of Areas, Volumes, and Weights. Use of the Planimeter. Work diagrams. Indicator diagrams. Energy Charts. Geometric loci. Tangents and Normals. Mechanism paths. Vector Summation. Horizontal and Metric Projection. Tangent and intersecting Surfaces of Solids. Copying Processes.

**CAMS:**—Cam design. Cams to lift with uniform velocity. Cams to lift with uniform acceleration. Special Cams. Conditions for quiet running. ,

**TOOTHED CIRCULAR WHEELS:**—Shapes of Wheel teeth. Spur Gearing. Pin Wheels and racks. Chain Wheels. Bevel Wheels. Conditions for accuracy and smooth running.

**VALVE DIAGRAM:**—The Reuleaux, Zeuner, and Bilgram Valve diagrams. The Valve ellipse. The Meyer Expansion Valve. Stephenson's Link Motion.

**DYNAMICAL PROBLEMS:**—Effort, Acceleration and Velocity diagrams. Simple harmonic motion. Relative motion ; velocity and acceleration diagrams. Piston and crank Effort Diagrams.

**GRAPHIC STATICS:**—Composition and resolution of forces acting in one plane. Moments and Couples. The Link Polygon. The Suspension Bridge. Determination of Centroids, and moments of inertia of plane areas. Classification of braced structures. Force diagrams for simple non-redundant structures of two and three dimensions. Roof Trusses, Stresses, due to Dead Loads and to Wind Pressure. Braced Cantilevers. Bending Moment and Shearing Force diagrams for straight beams under various modes of loading.

#### **D. MECHANICAL DRAWING.**

##### **SECOND YEAR.**

**INTRODUCTION:**—Strength and nature of materials used in Machine Construction. Strains and Stresses. Elasticity and Elastic Limit. Effect of Live loads. Factor of safety. Cast Iron. Malleable Cast Iron. Chilled Castings. Wrought Iron. Steel. Varieties of Steel. Case Hardening. Tempering and Heat Treatment of Steel. Copper. Alloys of Copper. Bronze or Gun-Metal Phosphor-Bronze. Manganese-Bronze. Brass. Muntz Metal. Naval Brass. "White" metals. Wood.

**MACHINE AND ENGINE DETAILS:—**Preparation of complete working drawings and specifications, from sketches and notes obtained by actual observation, investigation and measurement of details.

Study of proportion in machine details, by observation, calculation, and measurement. Keys and cotters. Pipes and Pipe joints. Shafting and Shaft Couplings. Pedestals and Plummer Blocks. Hanger Brackets. Wall Boxes and Footsteps. Counter shafts. Pulleys and Speed Cones. Spur and Bevel Gears. Lubricators. Cranks. Crank Shafts and Eccentrics. Pistons and Piston Rods. Cross-Heads and Guides. Connecting Rods. Stuffing Boxes. Valves. Valve Rods. Eccentric Rods and Links.

**STEAM BOILERS:—**Iron and Steel suitable for boiler construction. Strength of Cylindrical Boiler Shells. Cylindrical Furnaces. Modern Furnaces for high pressures. Resistance to collapse. Experiments by Lloyds' Registry and the Board of Trade. The Fox, Purves, Morrison and Deighton Furnace. Flat Surfaces. Bolts and Stays. Diagonal Stays. Palm Stays and Gussets. Tube plates. Tubes. Stay tubes. Grate Area and Heating Surface, and Steam per lb. of coal. Openings in Boiler Shells. Steam Domes. Manholes and Doors. Riveting. Zig-zag riveted and Chain riveted joints. Single, Double, and Treble riveted Lap and Butt joints. Efficiency of Riveted Joints. Graphical methods of design. Lever, Dead Weight, and Spring Loaded Safety Valves. Steam Pipes and Stop Valves. Feed Pipes, Economisers, Filters and Feed Pumps.

**SIMPLE STEAM ENGINE:—**Determination of the general dimensions for a simple, single cylinder steam engine, given the Indicated Horse Power, Speed, and Boiler Pressure.

**FINISHED DRAWINGS:—**Students are expected to prepare, from their own sketches and notes, complete working drawings and specifications of some simple type of boiler, with all its mountings and fittings, and also of a single cylinder steam engine. The engine may be a horizontal or vertical type, but all the dimensions must be carefully calculated, and the calculations handed in with the drawing. If the sketches used are from an existing steam engine, the dimensions must be checked and compared with those obtained by calculation.

**TRACING AND BLUE PRINT:—**All drawings will, in the first instance, be neatly and accurately finished in pencil. These pencil drawings will be traced by the student, and blue print taken on Ferro-paper prepared by the student himself.

**NOTE BOOK:—**Great importance is attached to the students' sketch-book in this class. It will be examined periodically, and marks awarded. No drawing will be considered, if the corresponding sketches are not found, together with other necessary particulars, in the student's own note-book.

## Mathematics.

### SECOND YEAR.

Revision and more advanced treatment of parts of the First Year Syllabus, with examples and illustrations of special importance to Mechanical and Electrical Engineers.

**DIFFERENTIAL CALCULUS (continued):—**Hyperbolic Functions. Successive Differentiation. Theorem of Leibnitz. Slope and Point of Inflection. Maxima and Minima. Evaluation of "Indeterminate" forms. Partial Differentiation. Elements of Curve Tracing referred to rectangular co-ordinates. Tangents.

Normals. Subtangents. Subnormals. Asymptotes. Curvature. Applications to Engineering Problems.

**INTEGRAL CALCULUS** (continued):—Definite and Indefinite Integration. Integration by parts. Rational Fractions. Formulæ of Reduction. Applications. Differential Equations of the First Order and First Degree. Linear differential equations with constant coefficients. Integral Curves, with applications to Mechanics. Successive Integration. Double and Treble Integrals, with practical applications. Practical problems involving differential equations.

**MECHANICS**:—Composition of Velocities. Motion of Projectiles. Uniplaner Kinematics. Instantaneous Centre. Body and space Centroides. Motion of a particle. Differential Equations of Motion. Constrained motion of a particle. Moments of Inertia. Momental Ellipse. Determination of the Principal Axes of Inertia of an Unsymmetrical Plane Figure. Motion of a rigid body about a fixed axis. Pressure on the axis. Energy of a body moving in any manner in a plane. Applications of the principles of Energy and of Momentum. Angular Velocity as a Vector quantity. Parallelogram of Angular Velocities and of Angular Accelerations. Angular Velocity about a moving line. Angular Momentum as a vector quantity. Introduction to the theory of Spinning Tops and Gyroscopes, with easy examples. Combined Rotation and Translation. Centre of Percussion. The Connecting Rod of an Engine.

**THERMODYNAMICS**:—Thermal Capacities. Heat and Energy. The Kinetic theory of gases. Isothermal and Adiabatic Expansion. Ratio of Specific Heats. The fundamental equations for a Perfect Gas. The Ideal Heat Engine. Reversible Cycles. Carnot's Cycle. The Second Law of Thermo-dynamics. Carnot's Theorem. Lord Kelvin's Absolute Scale of Temper-

ature. Entropy. Temperature-Entropy diagrams. The *theta phi* diagram for water and steam.

## Electrical Engineering.

### SECOND YEAR.

PRINCIPLES OF ELECTRIC AND MAGNETIC ACTION AND MEASUREMENT :—Attractive Force of Magnets. Force between Current and Magnet, and between two-Current Carrying Conductors. Exciting Force and Resulting Fields. Application to Dynamos. Self-Induction Capacity. Ohm's Law. Wheatstone Bridge. Induced E. M. F., and applications of Dynamos.

### ELECTRIC AND MAGNETIC PROPERTIES OF MATERIALS.

(a) ELECTRIC PROPERTIES OF MATERIALS :—Conductors, and Insulators. Insulating Materials. The Insulation of wires and cables. The effect of moisture and heat on conductors and insulators. Resistance, Specific Resistance and Temperature Co-efficient of conductor. Heating of single conductors and coils. Construction of Resistance. Hysteresis and Eddy Current Losses.

(b) MAGNETIC PROPERTIES OF MATERIALS :—Magnetic quality of iron. Permanent Magnets and Electromagnets. Residual Magnetism. Permeability. Laws of Magnetic Circuit and calculations thereon.

CONTINUOUS CURRENT :—Generation by mechanical, thermal and chemical means.

DYNAMO-ELECTRIC MACHINES :—Physical principle and essential parts of both Generators and Motors. Continuous-current Dynamo Electric Machine. Series, Shunt and Compound winding. Ring and Drum armatures. Two-pole and Multipolar Fields. Starting and Regulating Appliances. The Magnetic Field of Dynamo-Electric machines.



**THE MANAGEMENT OF ELECTRICAL MACHINERY :—**  
Installation of Generators. Electrical Connections  
and Operations of Electrical Motors.

**ELEMENTARY ALTERNATE-CURRENT PRINCIPLES :—**  
Graphical representation of an A. C. Frequency,  
Phase and effective value of current and voltage.

**BATTERY :—**Setting up a Secondary Battery.  
Management of a Secondary Battery. Its care and  
daily attendance.

**ELECTRIC LIGHTING :—**Main Switch, Switchboard,  
Distributing Board and Branch Switches. Main Cut-  
outs and Fuse-boards. Arc Lamps. Mechanisms  
and principles involved in their use and testing.  
Ceiling-roses and wall-plugs. Incandescent Lamps,  
their life, efficiency and cost. Pendants, Electroliers,  
Wall-Brackets and general fitting cables. Casing and  
Running the wires. Arranging the Circuits. Pro-  
per size of wires for a given number of lamps. Testing  
the Wiring Electric Fittings. Wiring Rules and  
Regulations. Private Installation Work.

Testing and Locating troubles in direct-current  
machines.

**LIGHTNING CONDUCTORS :—**Setting up and testing.

### **EXPERIMENTS OF MAGNETISM AND ELECTRICITY.**

- (1) Determination of the Mechanical Equivalent of  
heat (Electrical Method).
- (2) Comparison of Electromotive Forces.
- (3) Effect of size and distance between the plates of  
a Cell on its E. M. F. and Internal Resistance.
- (4) Determination of the Relative Inductivities of  
Materials.
- (5) Measurement of Magnetic Permeability.
- (6) Determination of the Relative Magnetic Quali-  
ties of different samples of magnetic materials.
- (7) Measurement of Magnetic Hysteresis.

- (8) Experimental Determinations of Leakage, Absorption and Residual Charge in Condensers.
- (9) Relation between "Time Constant" and Current in a Condenser Discharge.
- (10) Absolute Measurement of the Capacity of Condensers.
- (11) Influence of capacity in Transmission line.
- (12) Capacities in series and parallel.
- (13) Absolute Measurement of Mutual Inductance.
- (14) Comparison of Co-efficients of Mutual Inductance.
- (15) Determination of Laws of the Combination of Self-Inductance in parallel.
- (16) Locating troubles in a direct-current machine.

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### Mining.

#### SECOND YEAR.

*Note.*—Mining students take the same course in the Second Year as the Engineering students, with the exception of Mathematics, in place of which they take Geology.

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### Geology.

#### I. PHYSICAL GEOLOGY.

- (a) The Earth as a Planet. Its larger surface features.
- (b) Atmospheric Agents and their effects. Action of surface and underground waters, and of ice.
- (c) The Ocean; its Movements and Work.
- (d) Distribution of Temperature and Pressure on the Earth; and its Density. The Internal Forces and their Effects. Subsidence and Elevation. Volcanoes and Earthquakes.
- (e) Characters and Relations of Rock Masses. The Modes of Formation and Occurrence of Aqueous and Igneous Rocks (Strike,

Dip, Jointing, Folding, Faulting, Cleavage, Foliation; Interbedding and Intrusion of Igneous Rocks). Features produced by Denudation (Outcrop, Escarpments, Outliers, Inliers, Unconformity, Overlap).

## II. ELEMENTARY MINERALOGY AND PETROLOGY.

Physical Characters and Chemical Composition of common rock-forming Minerals. Classification and Description of Rocks. The more important relations of rocks one to another, and the changes which they have undergone.

## III. ELEMENTARY STRATIGRAPHY.

Stratigraphical Geology with special reference to India. Nature and Relations of the chief Fossils characteristic of the successive Geological Periods.

## IV. ECONOMIC GEOLOGY.

Special study of Rocks used as Fuel, Building Material, Road Metal, &c. Geological Problems connected with Water Supply.

## PRACTICAL WORK.

Description and Identification of common rock-forming Minerals, and of the principal varieties of Rocks. The study of the structure of the chief types of rocks in thin sections under the microscope.

Identification of common Fossils, and recognition of their stratigraphical horizon.

The interpretation of simple Geological Maps by description, and the drawing of sections.

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## Strength of Materials.

## THIRD YEAR AND FOURTH YEAR.

INTRODUCTION :—Mechanical properties of metals. Elastic Limit and Yield Point. Ductile Strains.

**Actual and Nominal Stress.** Effect of shape of test piece. Raising Elastic Limit by Strain. Hysteresis. Hardening and Annealing. Influence of Rate of Loading. Compression. Fractures. Effects of Temperature. Stress due to temperature changes. Factors of safety.

**ELASTIC STRESS AND STRAIN:—**Moduli of Direct, Transverse, and Cubical Elasticity. Poisson's Ratio. Relation between the Elastic Constants. Resolution of Stress. Ellipse of Stress. Principal Planes. Principal Stresses and Strains.

**VARIABLE LOADS:—**Resilience. Effect of Repeated Stresses. Live Loads. Resistance to shock. Fatigue. Experiments of Wohler, Reynolds, Smith, Stanton, Bairstow and others, with deductions. Factors of Safety.

**BENDING:—**Moments of Resistance. Relations between Stress, Curvature, Slope and Deflection. Diagrams of Contraflexure. Relations between Bending Moment and Shearing Force. Longitudinal Shear. Mohr's diagrams. Graphical Methods of determining the Moment of Resistance of Irregular sections and Heterogeneous sections. Ferro-Concrete beams and slabs. Bending beyond the elastic limit. Modulus of Rupture. Built-in and continuous beams. Symmetrical and Unsymmetrical Loading. Beams of varying cross-section. Carriage springs. Secondary effects of bending. Resilience of beams. Deflections from resilience. Transverse Curvature. Deflections due to shearing. Deflection Curve for a Beam of varying section, loaded in any manner and continuous over a number of supports. Strength of Wheel teeth. Strength of Propeller Blades.

**TWISTING:—**Relation between Twisting Moment, Angle of Twist and Shearing Stress. Effects of Overstrain. Shafts of Section other than Circular.

Combined Twisting and Bending. Effect of End Thrust. Torsional resilience. Helical spring, close coiled and open coiled.

**DIRECT AND BENDING STRESSES :—**Long and short columns. Euler's, Gordon's, Rankines' and Fidler's formulæ for long Columns. The Monerieff Formula. Effect of Eccentric loading on short and long columns and tie-rods. Struts and rods with lateral loads. Use of strut formula, and comparison with experiments.

**STRESS IN CYLINDERS AND SHELLS :—**Strength of thin Pipes and Cylindrical Shells. Thick Cylinders. Variation of Stress in a Thick Cylinder. Cylinders shrunk together. Wire-wound Cylinders. Rotating of wheel rim.

**BENDING OF CURVED BARS :—**Stress in Hooks, Rings, Chain Links, Flat Spiral Springs, Arched ribs, with three and with two hinges. Fixed ribs. Temperature stresses. Hanging wires and chains.

**PRACTICAL TESTING :—**Commercial tests of iron, steel, brass, copper, cement, stone, brick, and timber. Tests to be carried out according to the British and other standard specifications, and the results compared with the requirements of those standards.

Determination of Strength and Elastic Constants, and the variation of these with rate of loading, temperature and mode of application of load. Fatigue of Metals. Single bend tests. Hardness tests. Impact tests. Testing of long and short columns. Shearing tests. Torsion tests. Use of Extensometers and Autographic Recorders. Tension and Torsion of wire and wire ropes, and chains.

## **Theory of Structure and Structural Design.**

### **THIRD YEAR AND FOURTH YEAR.**

**INTRODUCTION :—**Classification of Braced Structures. Loads and working Stresses. Stress dia-

grams for Framed Structures. Wind Pressures. Method of Sections. Live Loads. Factor of Safety.

**BENDING MOMENTS AND SHEARING FORCE:—**Diagrams for both Dead and Rolling Loads. Application to Traction Engines, Locomotives and Trains. Equivalent Distributed Load. Continuous and Fixed Beams. Characteristic Points.

**COLUMNS AND STRUTS:—**Practical considerations in selecting Type of Column. Practical details of connections. Caps and Bases. Column Foundations. Practical application of Formulæ to the design of Columns and Struts. Live Loads on Columns. Rivet pitch in built-up columns.

**ROOFS AND ROOF TRUSSES:—**Forms of Roof Trusses. Roof Coverings. Procedure in Designing a Roof: Spacing of Principals, Loads, Reaction, Stress Diagrams, Wind Bracing, Wind Screen, Detailed Design of Members, Details of Covering.

**BEAMS AND GIRDERS:—**Beams and Rolled Joists, Channels, and Plates. Parallel Plate Girders, and Girders of Variable Depth. Design of a Plate Girder: Booms, Web Plates, Stiffeners, and Bearings for Girders. The Plate Girder Bridge. Connection of Cross Girders to Main Girders. Systems of Flooring.

**DESIGN OF BRACED STRUCTURE:—**Types of Open or Web Girders. Counterbracing. Design of Railway Bridge: Booms, Joints in Boom plates, Riveting in the Booms, Web Bracing, End Posts and Bearings, Floors and Rail Bearers, Wind Bracing Deflection Diagrams.

**MASONRY STRUCTURES:—**Classes of Masonry employed for Engineering Structures. Distribution of Pressure on Foundations and Joints. Retaining Walls. Earth Pressure. Rankine's Formula. Stability of Masonry and Brickwork Structures. Arches, Dams, Chimneys. Reinforced Concrete and Brickwork.

**DRAWING AND DESIGN:—**Students must complete the following :—

Two types of Roof Truss.

One Plate Girder Bridge of small span.

One large Braced Structure.

Considerable freedom of choice will be given in these designs, but they must be sound practically.

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### **Theory of Machines.**

#### **THIRD YEAR AND FOURTH YEAR.**

**INTRODUCTION :—**Definitions relating to divisions of the subject. Kinematics and Dynamics of Machines. The importance of the subject in regard to the problems that occur in machine and engine design. Bibliography.

**KINEMATICS OF MACHINES :—**Plane Motion. The Elements of Mechanism. Links, Chains, and Mechanism. Instantaneous or Virtual Centres. Relative Linear and Angular Velocities. Diagrams of Velocity and Acceleration. Valve Gears and Valve Gear Mechanisms.

**MECHANISMS :—**Parallel Motions. The Pantograph. Indicator Mechanisms. Indicator Rings. Quick-Return Motion. Epicyclic Trains. Bevel, Worm, Helical, and Screw Gearing. Change-speed Gears for Lathes and Motor Cars. Feed Mechanisms. Boring and turning Mills. Drilling Machines. Automatic Power Chucks. Cyclometers. Steering Gear Mechanism. Differential Gears. Humpage Gear. Automatic Screw-Cutting Machine. Machines for drilling holes of various shapes. The Copying Lathe. Toggle joints. "Pin and Slot" mechanisms. Air drills. Rigg's Hydraulic Engine. Rotary Engines and Pumps. Stone-Crushing Machines. Hooke's Joint. Multiple-Spindle Drilling Machines. Oldham's Coupling.

**TOOTHED AND CIRCULAR WHEELS :—**Involute and Cycloidal Teeth, Special teeth. Chain Gearing. Machines for cutting teeth. Fellow's Spur-gear Shaper. The Bilgram and Gibson Bevel Gear Planer. Worm-wheel Shapers. Gleason automatic Bevel Gear Generator.

**NON-CIRCULAR WHEELS ROTATING ABOUT PARALLEL AXES :—**Given the Pitch Curve of one wheel to obtain the Pitch Curve of the other. Elliptic Wheels. Harfield's Steering Gear. Quick-return Motions. Logarithmic and "lobed" wheels. Cams and Cam design. Important examples of Cam work. Frictional Resistances and Lubrication of Cams.

**DYNAMICS OF THE STEAM ENGINE :—**Velocity and Acceleration of the Piston. Crank Effort diagrams. The Fly-wheel. Combination of Crank Effort Curves and the Fluctuation of Energy. Governors. The Rith-Dalby diagram. Oscillations of the Governor. Relay Governors. Rotating discs, and critical speeds.

**BALANCING OF ENGINES :—**Balancing of Revolving Masses. Graphical Methods. Two, three, and four crank system. Experimental proofs. Dalby's Model. Balancing of reciprocating Masses, with long Connecting Rods. Balancing of Locomotives. Secondary Balancing. Unbalanced Forces and Couples. Klein's Construction. Klein Curves. Combination of Klein Curves to obtain the Unbalanced Couple belonging to the Reciprocating Masses of an Engine. Approximate methods of drawing the Acceleration Curves. Vibration of Supports. Damping. Longitudinal and Torsional Vibrations. Motion of the Connecting Rod and its effect on the frame and on the Turning Moment, exerted by the Crank. Balancing the Connecting Rod. Bennett's Construction.

**FRICTION AND EFFICIENCY :—**Friction in Mechanisms and Machines: Lubricants and the Theory of Lubrication; the Design and Lubrication of Bearings.



**SPINNING TOPS AND GYROSCOPES :—**Introductory theory. Gyroscopic Motion. Precession, Oscillation and Resistance. Effect of reactions in the mounting of a Gyroscope. Practical applications of the Gyroscope.

## **Hydraulics and Hydraulic Machines.**

### **THIRD YEAR AND FOURTH YEAR**

**INTRODUCTION :—**Definitions and useful data. Division of the Subject. Bibliography. Fluids and their properties. Compressible and incompressible fluids. Viscous fluids and Viscosity. Free Surfaces. Hydrostatics. Intensity of pressure. Transmission of pressure. Pressure Head. Definitions relating to Flow of Water.

**FLUIDS AT REST :—**Pressure on immersed surfaces. Total Pressure, Resultant Pressure, Centre of Pressure, and Pressure Diagram for any plane or irregular area immersed in water. Graphical determination. The Piezometer Tube, the Barometer and the differential Pressure Gauge.

**FLOATING BODIES :—**Principle of Archimedes. Condition of Equilibrium. Centre of Buoyancy. Metacentre. Condition of Stability. Stability of floating pontoons, docks, and of vessels containing water. Experimental determination of Metacentric height. The Metacentric Diagram. Curves of Stability.

**FLUIDS IN MOTION :—**Steady and Unsteady Motion. Energy per lb. of water passing any section in a stream line. Velocity head, Pressure head, and Position head. Bernoulli's Theorem. The variation of Pressure across Stream Lines. Radiating Currents. Distribution of Pressure and Velocity in Free and Forced Vortices. The scouring of the banks of a river at the bends. The Venturi Meter. Extension

of Bernoulli's Theorem to include loss of head due to friction or internal motions of the fluid. Laws of flow through Orifices, Mouth-pieces, Notches, and Weirs. Velocity of approach. Thomson's Principle of Similarity. Bazin's Experiments. Flow over broad-crested Weirs. Form of Nappe, and its effect on the discharge. Flow over Dams. Form of Weir for accurate gauging. Determination of Discharge by approximation method, when velocity of approach is unknown. Time required to lower the water in a reservoir a given distance, by means of a weir. Time required to empty a tank or reservoir. Relation between rainfall and flow from Catchment Area. Practical gauging by weirs. Separating weirs. Influence of Temperature on Coefficients of discharge.

**FLUID FRICTION :--**Laws of Fluid Friction. Froude's Experiments. Friction discs in water. Skin resistance of ships. Curves of Resistance.

**FLOW THROUGH PIPES :--**Resistances to flow. Loss of head by friction and other causes. The Laws of Flow. Critical Velocity. Conditions for steady stream line motion, and for sinuous motion. Empirical Formulae of Darcy and Chezy. Reynold's Experiments and the Logarithmic Formula. Loss of head due to bends, elbows and changes of section. Piezo-meter connections. Practical problems. Branched pipes and pipes connecting a number of reservoirs. Transmission of Power along pipes by hydraulic pressure. Pressure on pipe bends and on bodies placed in a pipe filled with flowing water. Meters. Water Hammer effects. Maximum Power Transmitted.

**FLOW IN CHANNELS :--**Ordinary forms of Channel. Formulae of Chezy, D'Arey and Bazin. Experiments of Bazin Logarithmic Formulae. Distribution of Velocity in the cross-section, and in horizontal and

vertical sections of open channels. Slopes of Channels, and the velocities allowed in them. Aqueducts and Sewers. The best form of channel. Curves of Velocity and Discharge. Methods of Gauging the Flow.

**HYDRAULIC MOTORS AND MACHINES :—**Gravity Machines. Pressure machines. Energy stored, and energy available. Maximum Power transmitted by a Water Main. Accumulators and Intensifiers. Hydraulic forging presses, riveters, cranes and lifts, with details of special valves and devices. Impulse of water on Vanes. Work done on a single Vane and on a series of Vanes. Conditions which the Vanes of hydraulic machines should satisfy. The Pelton Wheel Turbines. Impulse and Reaction Turbines. Turbines designed for Axial Flow, Radial Flow (Inward and Outward), and Mixed Flow. Effect of Centrifugal Head in Turbines. Determination of Dimensions and Projections of Blades. Governing Tests of Efficiency at various loads.

**PUMPS :—**Reversed Gravity and Pressure Motors, Bucket Pumps. Plunger Pumps. Combined Bucket and Plunger Pumps. Plunger Pumps. Continuous Delivery and High Pressure Pumps. Pump Valves. Fluctuation of Delivery. Cavitation. Direct-acting Steam Pumps. Diagrams of Effective Pressure. The reversed turbine as a centrifugal pump. Modifications necessary. Design of Vanes. Work imparted to the Water by the Wheel. Relation between the Velocity of Whirl, the Radial Velocity, and the Peripheral Velocity. Centrifugal Head, and its effect. Efficiencies. Design of Casings. Volute Chambers, Vortex or Whirlpool Chambers. Frictional losses. Complete design of a pump for a given discharge. Multiple-lift Centrifugal Pumps. Turbine Pumps. Tests of Efficiency.

## Heat Engines.

### THIRD YEAR AND FOURTH YEAR.

Revision and more advanced treatment of the Subject of the Second Year Syllabus.

**FUEL TESTING :—**Coal, Coke, and other fuels. Selection of Sample. Determination of moisture present. Determination of Calorific Value. The Calorimeter Log-Sheet. The Bomb Calorimeter. The Gas and Oil Calorimeter. Corrections and complete Log-Sheet. Analytical Methods.

**ANALYSIS OF FLUE GASES :—**The Orsat Apparatus. Tollin's Burette Automatic  $\text{CO}_2$  Recorders and Indicators. The Econometer. Minimum Air and Excess Air. Loss of heat in Flue Gases.

**BOILER TESTING :—**The Objects of a Boiler Test. Rules for conducting steam boiler trials. Determination of Fuel burnt per square foot grate per hour. Measurement and sampling of Fuel. Fuel Log-Sheet. Determination of Pounds of Water evaporated per pound of Fuel. Measurement of Feed Water Log-Sheet. Temperature Measurements. Temperature Log-Sheet. Sampling the Fuel Gases. Plotting the Observations. Water Level Corrections. Thermal Efficiency. Smoke tests. Boiler trial Summary. Tests of Economiser and Superheater. Heat Accounts and Deductions.

**STEAM ENGINE TESTING :—**Measurement of Power Output and Power Input. Brakes and Dynamometers. The Dynamo as a Dynamometer. Log-Sheets. The Transmission Dynamometer. The Fottenger. Hopkinson-Thring and Hamilton-Gibson Torsion Meters. The Dynamophone. The Indicated Horse Power. Use of different types of Indicator and Indicator Rings. The Flash Light Indicator. Ripper's Mean Pressure Indicator. "Indicated Steam," and Actual Steam Consumption Log-sheet. Curves of

Torque. Horse Power and Mechanical Efficiency. Analysis of the Indicator Diagram. Detection of Faults. Setting Valves, Eccentrics, Link Blocks and Radial Gear. Adjustment of Valves with different types of Valve Gears. The setting of the Governor. Adjustment of Clearance. Adjustment of Bearings, Pistons, and Slides. Transfer of Indicator Diagram to the Entropy Chart.

**SUBSIDIARY TESTS AND ADJUSTMENTS :—**Testing and setting of Pressure Gauges. Testing and adjusting of Indicator Springs. Measurement of the Dryness of Steam Separating and Throttling Calorimeters. Dryness of Steam. Measurement of Temperature at various points with the special apparatus arranged for the study of wall Temperatures. Deduction and Measurement of the study of wall Temperatures. Deduction and Measurement of Valve leakage Testing of heat insulating material.

**TESTING OF AUXILIARY MACHINERY :—**Testing of Feed Pumps. Pump diagrams. Curves of Theoretical and Actual Discharge. Horse Power and Steam Consumption. Testing of Centrifugal Pumps. Air Pumps, Injectors, Fans and Air Compressors.

**TESTING OF INTERNAL COMBUSTION ENGINES :—**The Indicated Horse Power and Brake Horse Power. Analysis of the Indicator Diagram, with detection of Faults and of necessary adjustments. Adjustment of Spark, Air Supply and Fuel. Setting of the Governor. Determination of Mechanical and Thermal Efficiencies. Measurement of Gas or Oil supply and of the Air supply. Dalby's Method. Heat converted into Work. Heat to Jacket and to the Exhaust. Calorimeter Curves giving Fuel Consumption and Efficiencies at different loads. Variation of Thermal and Mechanical Efficiency with Compression. The Complete Heat Account. Comparative tests of Four Cycle and Two Cycle Engines.

**THEORY OF HEAT ENGINES:—**The Laws of Thermo-dynamics. Properties of Air and Steam. Relations of Pressure, Volume and Temperature. The Fundamental Equations of a Perfect Gas. Adiabatic and isothermal Expansion. Cyclic operations and the conditions of maximum efficiency. The Constant Temperature, Constant Volume, and Constant Pressure Cycles. The perfect Engine using a Regenerator. The Hot Air Engine. The Gas and Oil Engine Cycle. The Diesel Engine Cycle. Thermo-dynamics of the Steam Engine. Efficiency of a perfect steam engine. Heat drop. Rankine's Cycle. Drying and Superheating steam by throttling. The Temperature Entropy diagram, for Water and Steam. Clapeyron's Equation. Mollier's Entropy Heat and Pressure Heat diagrams. Practical applications of the Energy Chart to steam engine problems. Use of the Energy Chart in Design of Steam Engines.

**THE STEAM TURBINE:—**Advantages of the steam Turbine as compared with Reciprocating Engine. Classification of Steam Turbines. Theory of Steam Jet and Nozzle. Action of Steam Jet on Blades. General Thermodynamics of the Steam Turbine. The Mollier Diagram. Nozzles and Guide Blades. Vector Diagrams. Design of Impulse Turbine. The Velocity-Compounded Impulse Wheel. Reaction Blading. Design of the Reaction Turbine and the Impulse Reaction Turbine. The A. E. G. Curtis, Reteau, Zoello, and Parsons Turbine. Workshop Practice. Construction of Rotors, Casings. Blading, Dummies, Bearings, Oil Baffles, etc. Methods of Lubrication. The Setting of a Turbine. Methods of Adjustment for wear. Measurement of Power Output.

**AIR COMPRESSORS:—**Theory and Construction of Air Compressors. Transmission of Power by Compressed Air.

**MECHANICAL REFRIGERATION :—**General Principles. The Heat Pump. The Coefficient of Performance. Reversal of Heat Engine Cycles. Reversal of Joule and Rankine Cycles. Air Machines, Absorption Machines, and Vapour Compression Machines. Choice of a Liquid for Vapour Compression Machines. Entropy Diagrams for Ammonia, Sulphurous Acid, and Carbonic Acid. The Mollier *phi i*, and *p. i.*, diagrams. Mechanical details and designs of CO<sub>2</sub> and Ammonia Machines. Uses of Mechanical refrigeration and Industrial Applications of extreme cold.

**GAS AND OIL ENGINES :—**More advanced treatment of Second Year Syllabus, with special reference to design. The Crude Oil Engine, Diesel Engine, Two and Four Stroke Engines. Large size Gas Engines. The Gas Turbine.

### **Mechanical Engineering, Drawing and Design.** **THIRD AND FOURTH YEARS.**

The principal object of this course is to produce practical Draughtsmen, with a sound knowledge of the Principle of Design as applied to Boilers, Engines and Machines. In addition, to provide also a thorough training in Modern Drawing Office Routine, including Printing, Filing, Tabulating, Estimating and Checking.

The Workshop Courses, as outlined in the Syllabuses for "Heat Engines," "Theory of Machines," "Theory of Structures," "Strength of Materials" and "Hydraulics," both as regards Lecture and as regards Laboratory work, will be co-ordinated with, and, to a certain extent, subservient to, this course. In this class, therefore, very little theory will be taught, but students will have to apply their knowledge to the working out in detail of approved designs. Students will be allowed a certain amount of choice as to the particular designs that they take up, especially in the

Fourth Year. The choice, however, will have to be of an approved and representative character, instructive and satisfactory from the standpoint of a Mechanical Engineer.

Students will be required to prepare complete working drawings, specifications, and estimates of the following:—

(1) A Boiler of some well-known standard type, with all Mountings, Fittings and Connections, including Feed Pumps and Injector. The Boiler to be of a given capacity and to work at a given pressure. In addition, a Superheater and Economiser of standard types may be added.

(2) A Compound or Triple Expansion Engine of a given Horse Power. Students must have very clear ideas concerning the relation between Boiler Capacity and the available Engine Horse Power, and specify accordingly. Complete detail drawings of the Valve Gear and all important fittings must be given, together with the necessary Condenser Plant, including Air Pump, and Circulating Pump.

(3) Some form of Gas or Oil Engine, with detail drawings of Piston, Piston Rod, Crank Shaft, Governor, etc.

(4) A Petrol Engine of a simple but representative type.

(5) A Steam Turbine of Moderate capacity.

(6) A Lathe. Any good modern type of lathe may be chosen.

Details and Attachment must be drawn separately.

(7) Some type of Drilling Machine. Horizontal, Vertical, Radial or Multiple Drill, with detail drawing of Feed arrangements.

(8) A Milling, Boring, Planing, Slotting, or Gear Cutting Machine; or any machine in which the student has any particular interest.



(9) A Hydraulic Pressure Machine.

(10) A Centrifugal Pump or Water Turbine.

With regard to each design presented, the following points will have to be very carefully considered:—

1. Feasibility of Production, as regards material, labour, and process of manufacture.

2. Capacity of the Workshops to carry out the work with the tools and appliances available. If special tools are required, full particulars must be given.

3. Construction of Patterns and Moulds, with adaptability for rapid production. Any special devices to be fully described.

4. Degree of Standardization possible and advisable, especially with regard to details.

5. Possible Economy in Selection of Materials. Market prices must be quoted, and the choice of any unusual material justified.

6. Adaptation of Dimensions to the standard tools available. If special tools are to be provided, full particulars must be given, and the necessity for them explained.

7. Total Cost of Production with available Plant, with possible diminution, if special machines were provided.

8. Possibility of Economy by using special Repetition Appliances or processes, where large numbers are required.

9. Design of Jigs and Fixtures. The smallest number that will justify the manufacture of a special Jig or Fixture, must be determined.

10. Cost of running. The cost of running the boiler, engine, or machine, at different loads and under different conditions, must be carefully estimated. If possible, Curves of Performance must be provided.

**NOTE BOOKS AND SKETCH BOOKS.**—Great importance will be attached to a student's Note Books and Sketch Books. He will be expected to collect notes and sketches that will be of value to him in his career after leaving College. The marks awarded for any particular note or sketch will be in proportion to its practical value.

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## **Economics, Factory Management and Commercial Engineering.**

### **FOURTH YEAR.**

**INTRODUCTION:—**The general Problems of Design of Industrial works. Choice of Site. General Arrangement. Power, Plant and Equipment. Staff. Labour. Raising of capital, floating of business and works of public utility.

**GENERAL ADMINISTRATION:—**Staff Organization. Routine. Correspondence. Filing. Estimating. Production Efficiency. Output. Publicity. Orders and Issues.

**ADMINISTRATION OF WORKS:—**Regulations affecting Employees. Factory Act requirements. Accidents. Fire. Gate Control. Apprentices. Workmen. Labour Records, Time-keeping, Overtime, Drawing Office Routine, Materials, Stores, Stock and Production. Efficiency of processes. Rate-fixing. Inspection, Supervision, Despatch, Warehouse Stock, Final Inspection, Records and Routine of Delivery.

**ACCOUNT:—**Works Accounts and Estimates. Works Expenditure.

**ACCOUNT STANDING ORDERS:—**Stock Account. Cost. Allocation Accounts. Shop Charges. Process Product Accounts. Manufactured Stock Product. Stock-taking. Valuation of Loose Plant. Abstract of Works Accounts and Statistics.

**ROUTINE FORMS:**—For General Office, Wages Office, Drawing Office, Works Office, Pattern Shop and Pattern Stores, Foundry, Smithy General Stores. Tool Stores. Inspection Department. Work Dépôt, Warehouse, and Works Accounts Office.

**FINANCIAL ACCOUNTS:**—General System of Financial Accounts. Wages and Petty Cash Account. Purchases Accounts. Sales Accounts. Share Accounts. Private Accounts. Annual Accounts. Audit.

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## **Electrical Engineering.**

### **THIRD YEAR.**

**PRINCIPLES AND DETAILS OF DESIGNS, MANUFACTURE AND CALIBRATION OF SWITCHBOARD AND LABORATORY INSTRUMENTS:**—Action of measuring instruments. Deflecting and controlling forces, friction, dead-beatness and damping force Types of electrodynamic ammeters, voltmeters and galvanometers. Hot wire instruments. Methods of altering range of ammeters and voltmeters. Electrostatic voltmeters. Testing of Switchboards. Principles and Details of construction and general discussion of Switchboards, and the arrangement of busbars, measuring, controlling and protective devices. Use and choice of different switches, etc., for different purposes. Testing for conductivity. Magnetic tests of iron.

**DYNAMO-ELECTRIC MACHINES:**—Different types of motors in use, standards of value for a motor, relation of torque, speed and H. P., different types of load.

**D. C. ELECTRIC MOTORS:**—General discussion of the principles of action of D. C. dynamo and motor. Construction of and materials used in the manufacture of Brushes. Commutator and Field Magnets. Position of Brushes. Testing for break-down of Insulation, Commutation and Commutating coils.

Efficiency and characteristics of Generators and Motors, and their Experimental Determination and Calculation. Types of Generators and Motors for special purposes.

**INSPECTING AND TESTING:—**Adjustment, Friction, Balance, Noise, Heating and Sparking. Electrical Resistance. Voltage and Current, Speed and Torque, power and efficiency.

**LOCALISATION AND REMEDY OF TROUBLES:—**Spark-  
ing at the commutator, heating of brushes, of field magnets and bearings. Noisy operation, speed too high or too low, motor stops or fails to start, voltage of generator fails.

**BATTERY:—**Principles of Primary and Secondary Cells. Efficiency. Capacity. Deterioration, Diseases and Remedies of a Secondary Battery. Design of Battery house. Charging and discharging a battery. Detection of faults in a Secondary Battery, their testing, remedies.

**ELECTRIC LIGHTING:—**General principles of Lighting. Standards of value in lighting. Determination of candle-power required for illumination, lighting of rooms and streets, factors of the cost of lighting. Systems of central stations supply. Lighting, public and private. Busbars, Feeders, Distributors and Internal wiring.

**ELEMENTS OF ALTERNATE CURRENT:—**Generation by mechanical means. Frequency, Power, Power-factor, Self-inductance and Impedence. Wattless Current. Principles of Alternate Current Working. Application to Choke Coils. Use of rotating vectors. Self-induction in A. C. circuits, and relation between impressed voltage and current. General effect of capacity.

Graphical representation of power developed, power-factor.

Three-phase circuits, star and mesh connections. Graphical representation of measurement of three-phase power-supply. Production of rotatory field.

**A. C. MOTORS :—**General description of single and three-phase Synchronous motors and three-phase Induction motors, squirrel cage and wound motors, methods of starting, working characteristics of A. C. Motors.

**ELEMENTARY MATHEMATICAL THEORY :—**Units and simple measurements. Natural Frequency. Principles and details of measurements of Alternate Current Generators, Synchronous, Induction and Commutator.

Brief description of Electric Heating and Cooking apparatus, and their characteristic advantages. Electric cutting and welding.

*Electrical Engineering Testing Laboratory.*

(1) Calibration and Standardisation of Ammeters.

(2) Calibration and Standardisation of Voltmeters.

(3) Calibration and Standardisation of Wattmeters.

(4) Calibration and other tests on Electricity Meters.

(5) Efficiency and other Photometric tests on Electric Glow and Arc Lamps.

(6) Efficiency and other tests on Secondary Cells.

(7) Measurement and comparison of High, Ordinary, and Low Metallic Resistance.

(8) Localisation of Faults in Electric Light Mains.

(9) Determination of the "Characteristic" of Direct and Alternating Current Dynamos.

(10) Efficiency and Regulation of Direct and Alternating Current Dynamos.

(11) Efficiency, B. H. P. and Regulation of Direct and Alternating Current Motors.

(12) Influence of load and of distance of transmission on Voltage regulation of a line.

(13) Influence of the transmission voltage and of the cross-section of a line on its regulation.

## Electrical Engineering.

### FOURTH YEAR.

DESIGN OF DIRECT CURRENT GENERATORS AND MOTORS:—Calculations of armature. Fundamental Calculations. Armature winding. Dimensions of Armature core. Final Calculation of armature winding. Dimensioning of Commutators, Brushes and Current conveying part of a Dynamo. Mechanical Calculation about armature.

CALCULATION OF MAGNETIC FLUX:—Useful and total magnetic flux, calculation of leakage factor from dimensions of machine.

DIMENSIONS OF FIELD MAGNET FRAMES :—Forms of Field. Magnet frames, general construction rules, calculation of Magnetising circuit. Heating and Ventilation. Calculation of magnet winding. Coil winding calculation, series winding, shunt winding, compound winding.

DESIGN OF ALTERNATE CURRENT GENERATORS AND MOTORS:—Elements of design, and simple calculations connected therewith. Determination of E. M. F. and Current Curves. Armature winding. Heating and Ventilation. Losses, Efficiency and Characteristics. Short Circuit. Current Drop. Various Types of Motors. Circle Diagrams and Testing. Mechanical Construction. Parallel Running. Hunting. Influence of Damping Coils.

TRANSFORMERS:—Core and Shell Types. Induction and Ohmic drop. Methods of Cooling.

Special designs for large output, and high pressure Mechanical construction. Necessity for various Types. Simple calculations concerning Elements of Design. Testing.

CONVERTERS :—Various Types. Simple calculations concerning Elements of Design. Testing.

CONTINUOUS AND ALTERNATING CURRENT CIRCUITS :—Influence of Resistance, Capacity and self-inductance. Resonance. Free and damped Oscillations. Lightning Protection. Protection against Disruptive Discharges.

POWER TRANSMISSION AND DISTRIBUTION BY DIRECT AND ALTERNATE CURRENT :—

(a) TRANSMISSION :—Design and value of high tension and long distance transmission lines. Details of Erection, Construction, Testing and Maintenance. Safety Devices. Limitation of Voltage. Feeders and distributing mains. Substations, choice of positions, plant, general arrangement.

(b) DISTRIBUTION :—Medium and Low Voltage Distribution Systems. Mechanism of distribution for a public supply. Consumer's Circuit and connections. Motors and Plants. Requirements to be satisfied by insulated conductors used in distribution as regards voltage regulation, the three-wire system. Balancers. Use of Boosters and Motor generators. Rotary Converters and Motor Converters.

ELECTRIC TRACTION :—Electric Traction by Continuous and Alternate Current :—Principles and Details of systems of Electric Tramway and Railway Engineering ordinarily used. Permanent-way lines and Feeders. Surface and Conduct systems. Collection and Control of Current. Capital charges and Running Cost.

Development and utilization of water power.

ESTIMATING :—Cost of Power Plants for Generation. Transmission and Distribution of Electrical

Energy, and cost of Energy generated. Estimates for transmission lines and distribution systems. Selection of appropriate systems. Load curves and factors. Capital and Maintenance Costs. Working and Control. Reliability and Economy.

*Electrical Engineering Testing Laboratory.*

(1) Miscellaneous Tests with Alternating Currents.

(2) Measurement of Magnetic Permeability, Hysteresis and Self-inductance.

(3) Measurement of the Electric Capacity of Concentric and other Cables.

(4) Measurement of Power in Single and Polyphase Alternating Current Circuits.

(5) Efficiency and other tests on Single and Polyphase Alternating Current Transformers.

(6) Determination of the Periodic E. M. F., and Current Curves of an Alternator.

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## Mechanical and Electrical Engineering.

### FIFTH YEAR.

#### *First Three Months.*

The first three months of the fifth year will be devoted to the Project or Thesis. This would bear on a subject taken by the students in previous years. The Project must be so complete in every respect that it may be a model for a working scheme. It must embody a complete report and full survey, with detailed calculations and estimates. Drawings and diagrams of General arrangement and Details must be submitted. Reason must be given for the selection of every system or machine used in the project. In every case, the authorities must be cited in the marginal notes. In case of departure from the adopted practice, the opposite view must also be clearly



stated, and discussed in brief, in the report or elsewhere. Both Graphical and Analytical methods of treatment should be used to verify the results obtained, and thus to show that the student has a thorough understanding of both, where possible. Use of more recent practice will get better credit. Originality of construction, provided it is good, will be highly encouraged.

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### **Mechanical and Electrical Engineering Workshops and Laboratories.**

The Main Object of the Workshops and Engineering Laboratories is to train skilful, reliable and resourceful engineers.

No student should be eligible for a Degree in Mechanical or Electrical Engineering who has not obtained at least 60 % of the possible marks in all the Laboratory Workshops of the Department, and acquired considerable skill as a craftsman. These marks should include:—

(a) Marks awarded for daily or sessional work done in the shops.

(b) Marks awarded at special workshop tests.

The Professors of Mechanical and Electrical Engineering and others will inspect the week's work of each student, on "Inspection Day," every week.

In every shop, the ultimate standard of work required of such student will be a high one, his method of working must be correct, and the rate at which his work is executed must be up to Factory standard.

*For six weeks during the vacations, students will be allowed to work in any shop they choose (provided there is accommodation). During these periods, they will be under strict workshop discipline.*

and may receive pay for work done. Special mention will be made, in the final certificate, of the work done during these periods.

Students who are unsuccessful at Theory may, if they have obtained at least 70% in Workshop Practice, apply for the "*Complete whole-time Workshop Course*." This Course will aim at an exceptionally high practical standard, and include Workshop Practice of an advanced and special kind, the Control and Management of Engines and Machinery, Draughtsmanship, Workshop Estimates, and Accounts. A student showing exceptional ability at any particular kind of work, will be given every opportunity to excel and become an expert.

### PREVIOUS EXAMINATION IN SAMSKRIT.

There will be only ONE paper, of three hours' duration.

Books prescribed :—

Selections from the Hitopadesa and the Nalopâkhyâna (University Book Depôt).

In Samskrit Grammar, students should acquaint themselves with typical declensions, such as those of राम, मुनि, पितृ, लता, नदी, फल, मधु, and conjugation of roots like हस् in लट्, लङ्, लोट् and लृट् and also of कथ, नृत, विश, कृ in लट्, only, and simple Samâsas अव्ययीभाव तत्पुरुष (including कर्मधारय and द्विगु), द्वन्द्व and बहुव्रीहि), with examples.

### PRAVESIKA EXAMINATION.

(Same as in 1919.)

### MADHYAMA EXAMINATION.

(FACULTY OF ORIENTAL LEARNING).

• Samskrit (Language and Literature).

There will be ONE paper, of three hours' duration.

- (i) Valmikiya Rāmāyaṇa (Sundarakāṇḍa, Sargas 19-40).  
 (ii) Manusmṛti (Brahmchāri and Gr̥hastha Dharma).  
 (iii) Raghuvamśa (Sargas 10-15).  
 Composition and Translation.

### Hindi.

Composition.

### Further Course in Samskrit Grammar and Literature.

There will be FOUR papers.

*Paper I*—Siddhānta Kaumudī ( First half ), or

Kāśika (First half), or

Mugdhabôdha (with Commentaries of Durgadas and Ramtarkavâgish) (First half), or

Kalâpa with Parisîṣṭa, Pañchi by Tr̥lochana and *Vṛitti* by Durgasinha (First half), or

Sankṣiptasâra (with *ṭikâ* by Goichandra) (First half), or

Supadmavyâkaraṇa (with Paribhâṣâ, and *ṭikâ* by Viṣnumisra) (First half), or

Śabdârṇavachandrikâ (First half).

*Paper II*—Siddhānta Kaumudī (Second half) (omitting

Svaravaidiki & Uṇâdiprakaraṇa), or

Kāśikâ (Second half), or

Mugdhabôdha (with *ṭikâ* by Durgadas & Ramtarkavâgish) (Second half), or

Kalâpa (with Parisîṣṭa, Pañchi by Tr̥lochana and *Vṛitti* by Durgasinha) (Second half), or

Sankṣiptasâra (with Commentary by Goichandra) (Second half), or

Supadmavyâkaraṇa (with Paribhâṣâ, and *ṭikâ* by Viṣnumisra) (Second half), or

Śabdârṇavachandrikâ (Second half).

*Paper III*—Nyâyamuktâvalî (up to Pratyakṣakhaṇḍa),

Dasakumâracharita (Visrutacharita).

*Paper IV*—Śisupâlavadha (Sargas 1-2)  
 Kirâtârjunî (Sargas 1-3)  
 Vâmana's Kavyâlamkârasûtra.

### **A School of Indian Philosophy.**

The student may take up *any one* of the following Groups, in each of which there will be FOUR papers, each of three hours' duration:—

#### **(A) *Prachina Nyaya and Vaisesika.***

*Paper I*—Gautamasûtra, with Vishvanâtha's Vrtti.  
*Paper II*—Vaiśeṣikasûtra, with Upaskâra.  
*Paper III*—Muktâvalî (whole).  
*Paper IV*—Pañchalakṣaṇî-Mâthuri,  
 Siddhântalakṣana-Jâgadiśi.

#### **(B) *Navya Nyaya and Vaisesika.***

*Paper I*—Pañchalakṣaṇî Mâthuri.  
 Târkikarakṣâ.  
*Paper II*—Vyadhikaraka Jâgadiśi.  
*Paper III*—Siddhântalakṣana-Jâgadiśi.  
*Paper IV*—Avachchhedakattwanirukti-Jâgadiśi.

#### **(C) *Purvamimamsa.***

*Paper I*—Jaiminisûtra (with Mîmâmsâkutûhala, Adhyâyas 1-2).  
 Sâstradîpikâ (up to Nivita), or  
 Bhâṭṭadîpika (up to Nivita).  
*Paper II*—Sâstradîpikâ-Tarkapâda.  
*Paper III*—Mîmâmsâparibhâṣâ.  
 Mîmâmsâ Nyâyaprakâśa.  
*Paper IV*—Kâtyâyanaśrautasûtra (Adhyâyas 1-6).  
 Nyâyamuktâvalî, up to Pratyakṣakhaṇḍa.

#### **(D) *Vedanta.***

*Paper I*—Brahmasûtra (with Bhâṣya) (Adhyâyas 1-2, Pâdas 1-2).

Paper II—Vedântaparibhâṣâ.

Pañchadaśi.

Paper III—Mîmâmsâsûtra-Tarkapâda (with  
Mîmâmsâkutûhala).

Nyâyamuktâvalî, up to Pratyakṣa-  
khaṇḍa.

Paper IV—Bhagavadgîtâ, with Śankara  
Bhâṣya.

**(E) Visistadvaita and Dvaita Vedanta.**

Paper I—Brahmasûtra, with Sribhâṣya or  
Aṇubhâṣya (Adhyâya 1).

Paper II—Vedântatattwasâra.

Nyâyamuktâvalî, up to Pratyakṣa-  
khaṇḍa.

Paper III—Vedârthasamgraha.

Mâdhvasiddhântasâra.

Paper IV—Bhagavadgîtâ, with Râmânuja  
Bhâṣya, or with Mâdhvabhâṣya.

**(F) Sankhya and Yoga.**

Paper I—Sânkhyasûtra, with Aniruddhavṛtti  
Yôgasûtra with Bhôjavṛtti.

Paper II—Sânkhyakârikâ, with Gaûḍapâda Bhâṣya.  
Sânkhyatattwa Kaumudî.

Paper III—Sânkhyachandrikâ.  
Sânkhyasâra.

Paper IV—Yogasârasamgraha.

Nyâyamuktâvalî, up to Pratyakṣa-  
khaṇḍa.

**(G) Jaina Philosophy.**

Paper I—Prameyaratnamâlâ.

Saptabhangitarangiṇî.

Paper II—Syâdvâdmañjari.

Aptaparîkṣâ.

Paper III—Pramâṇa-naya-tattwâlokâlamkāra (Text  
only).

Tattwârthasûtra (Text only).

Paper IV—Sâmkhya Kârikâ (with Tattwakau-  
mudî).

Siddhânta Muktâvlî (Text only).

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***Hindu Law and Jurisprudence.***

There will be FOUR papers.

Paper I—Manusmṛti.

Yājñavalkyasmṛiti-Āchârakâṇḍa, with  
Mitâkṣarâ.

Paper II—Mîmamsâparibhâṣâ.

Nyâyamuktâvalî, up to Pratyakṣakhan-  
ḍa.

Paper III—Pâraskara Gr̥hyasûtra.

Āpastamba Dharmasûtra.

Paper IV—Mîmamsâsûtra (with Mîmâmsâkutû-  
hala, Adhyâyas 1-3).

Parâsarasmṛti.

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**Hindu Astronomy and Mathematics.**

**(A) Astronomy.**

( ज्योतिष )

Paper I—Lilâvatî (with Pâtiganita).

Paper II—Bîjagaṇita, with Avyaktagaṇita, Part I.

Paper III—Gr̥halâghava (up to Sûryagrahaṇa).

Paper IV—Rekhâgaṇita (Adhyâyas 1-4).

Phalitasamgraha.

**(B) Mathematics.**

( गणित )

(Courses not prescribed).

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**The Ayurvedic System of Medicine.**

There will be FOUR papers.

Paper I—Mâdhavanidâna (text).

Paribhâṣâ.

Paper II—Vijayarakṣita *ṭīkā* of Mādhavanidāna.

पञ्चलक्षणाधिकार, ज्वराधिकार, वातव्याध्यधिकार,  
तथा अर्शोऽधिकार

Paper III—Śaṅgadhara-paddhatī.

Rasendrasārasamgraha.

Nāḍīvijñāna.

Paper IV—Rājanighanṭa.

नवीन शारीरिक-साधारण-विज्ञान.

(Courses not prescribed).

### English.

(As in the Admission Examination.)

### History and Geography.

#### (A) History.

History of India and of England.

#### (B) Geography.

The whole World.

### MADHYAMA EXAMINATION.

(FACULTY OF THEOLOGY).

Paper I.—Valmīkiya Rāmāyaṇa (Sundarakāṇḍa, Sargas 19-40), Manusmṛti (Brahmachari and Gr̥hastha Dharmas), Raghuvamśa (Sargas 10-15).

Paper II.—R̥gveda Samhitā, Aṣṭakas 1-4 (with Svāra), or Yajurveda Samhitā with Svāra (Sukla Kṛṣṇa and Kānvasākha), or Sāmavedagāna (Purvarchika).

Paper III.—Manusmṛti, 2nd Chapter.

Purāna.	{	Matsya-Pratiṣṭhā Kuṇḍa Mandupabhāga.
	{	Mahābhārata, Adivamsāva- taraṇa, or Amsāvatarāṇa of Ādiparva.

Paper IV.—Laghukaumudī, or Nirukta, Adhyâyas  
3-5.

Hodachakra.

Paper V.—Grhyaṣutra (of the candidate's own  
Sâkhâ (with Mantrârtha), up to  
Vivâhprakarana.

Grhayoga (of the candidate's own  
Sâkhâ) (Kanthastha).

Śoḍaṣ-samskâra paddhati (of the can-  
didate's own Sâkhâ) (Kanthastha).

1921.

## ADMISSION EXAMINATION.

*Same as in 1920, with the following altera-  
tions:—*

(1) Under Modern Indian Languages,

For—

“There will be two papers.....in case such  
books have been prescribed”

Substitute—

“There will be two papers, each of three hours’  
duration.”

“The *first* paper will be set from the prescribed  
books of Poetry and Prose, with questions on Gram-  
mar and Idiom.

“The *second* paper will be a paper on Composi-  
tion, consisting of (1) an essay based on the subject-  
matter of the books prescribed and (2) a general essay  
or letter, or both. No questions on Translation or on  
Grammar will be set in this paper.”

(2) The courses in Botany to be as follows:—

### Botany.

The structure and germination of the seed. The  
conditions necessary for germination. Bean or Pea,  
Castor Oil seed, and the grain of maize, may be taken  
as examples.



The forms of normal and adventitious roots. The functions and adaptations of roots.

The stem and its branching. The bud. Underground stems, and their distinction from roots. The modifications of the stem.

*N.B.*—The forms of roots and stems should be taught by taking familiar types. For instance, *Colocasia* (kochu) and *Zingiber* (ahdi) may be taken as examples of Corm and Rhizome, respectively, etc. etc.

*Leaf*—Phyllotaxis; simple and compound leaf. The distinction of a compound leaf from a branch.

*Flower* and its morphology.

An intimate knowledge of the structure and habits, together with a correct technical description of the constituent parts of the following plants:

Sun-flower; pea; Lady's Finger or *Bhindi*; Onion; wheat or maize; *Neem* tree (*Melia*) *Ber* tree (*Zizyphus jujuba*.)

*Fruit*. Definition. Kind of fruit. Seed and fruit dispersal.

*Physiology*—Simple experiments on Photosynthesis, Transpiration and Respiration.

There will be two papers, each of three hours' duration, and a simple practical examination.

Paper I shall deal with (a) the structure and germination of the seed, and (b) general Morphology and Physiology.

Paper II will test the candidate's knowledge of specified plants mentioned above (e.g. Sun-flower, pea, Lady's finger or *Bhindi*; onion; wheat or maize; *Neem* tree (*Melia*) *Ber* tree (*Zizyphus jujuba*).

The subject should be taught, as far as possible, practically. There shall be no microscopic work.

#### PRACTICAL WORK.

Candidates will be required to dissect (with or without the aid of a lens), describe and draw parts of plants prescribed in the Syllabus.

Further, the candidates are expected to keep a record of all practical work done in the Laboratory in a note-book, which will be liable to examination by the University Examiners.

The following books are suggested for the use of the teacher :—

J. M. LOWSON: A Text-book of Botany (Indian Edition).

OLIVER: Elementary Botany.

(3) For the existing words under Drawing and and Manual Training, put the following courses for the two subjects treated separately :—

### Drawing.

There shall be THREE papers, of three hours' each, as follows :—

Paper I.—Free-hand Drawing from the Flat—Light and Shade, as in Macmillan's Official Drawing Books Nos. 9, 10, 14, and 19; and Birds and Beasts, as in Vere Foster's Drawing Books Series, as also copying to an enlarged and reduced scale.

Paper II.—*Model Drawing*—Drawing of common objects, with light and shade, and the following geometrical solids :—Cubes, Pyramids, Cylinders, Cones and Spheres.

Paper III.—*Geometrical Drawing*.—

- i. The theory and use of instruments, specially of Protractor and Marquois Scale.
- ii. Plain block-letter writing.
- iii. The whole of Practical Plane Geometry.
- iv. Drawing to scale, *viz.*, Scale of Chords, Diagonal Scale, Plain Scale.

Book suggested :—

Geometrical Drawing for Arts Students, by William Jesse, M.A., pp. 1 to 107 (omitting pp. 68 to 71), and pp. 117 to 120.

## Manual Training.

The Examination will consist of—

- (i) one paper, of three hours, in Drawing, and
- (ii) a Practical Examination, of four hours, in Wood-work.

### 1. *Drawing* :—

- (a) The use of Drawing Board, T-Square, Set Square, Compasses and Simple Scales.
- (b) Drawing in plan, elevation, and side-view of all models in the course, and in conventional Isometric projection or Oblique projection of those of a rectangular shape.

### 2. *Woodwork* :—

- (a) The use of the following tools :—

Jack Plane, Try Square, Marking Gauge, Steel Ruler, Marking Knife, Smoothing Plane, Tenon Saw, Bevel Square, Screw Driver, Firmer Chisel, Firmer Gauge, Hammer, Mallets, Bradawl, Compass, Gimlet, Bow-saw, Spoke, Shave, File, Brace and Bit.

- (b) Care of tools :—

The candidate should show his ability to put the common edged tools into fair workable condition.

- (c) The following joints, at least, should be included amongst the models :—

Lap Joint, Butt Joint, Half-Lap, Housing, Mortise and Tenon. Half-Lap Dovetail, Edge Dovetail, and Bridle Joint.

Books suggested :—

1. Manual Training for Indian Schools, by J. Y. Buchanan.
2. Manual of Instruction (Wood-work), by J. Charles Pearson.

3. The "Self-help" course of Wood-work, by  
E. J. Andrews.
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### INTERMEDIATE EXAMINATION.

*Same as for 1920, with the following alterations:—*  
Under "Composition in Modern Indian Language,"

For—

"There will be ONE paper.....It will be partly  
.....The following books.....style"

Substitute—

"There will be ONE paper on Composition in a  
Modern Indian Language, of three hours' duration.

"The paper shall consist of three essays only,  
one general and two based on the subject-matter of  
the books recommended for study. The essays based  
on the books shall not demand a detailed knowledge  
of the contents of them.

"The following books are recommended for general  
study, as presenting models of Composition and  
Style":—

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### B. A. EXAMINATION.

*Same as for 1920, with the following alterations:—*

Under "Composition in a Modern Indian Language,"

For—

"There will be ONE paper.....  
models of Composition and Style"

Substitute—

"There will be ONE paper on Composition in a  
Modern Indian Language. of three hours' duration.

"The paper shall consist of three essays, one  
general and two based on the subject-matter of the  
books recommended for study. The essays based on  
the books shall not demand a detailed knowledge of  
the contents of them.

"The following books are recommended for general study, as presenting models of Composition and Style":—

### B. Sc. EXAMINATION.

*Same as for 1920, with the following alterations:—*

- I Under "Botany," Second Paper,  
Delete—Amaryllideae, Irideae, Violaceae  
and Rosaceae;  
and Add:—Orchidaceae Ficoideae, Amarantaceae, Chenopodiaceae.
- II Under "Zoology," First Paper,  
Delete—Echinus, Cucumaria.

### M. A. EXAMINATION.

*Same as in 1920, with the following alterations:—*

- I Under Philosophy (Final),  
After the words, "There will be FOUR papers.....  
.....of three hours' duration,"

Add—

"There will also be a *viva voce* examination of a general nature."

In Group C,

For—Mackenzie: Introduction to Social Philosophy,

Substitute—Mackenzie: Outlines of Social Philosophy.

II Under "Political Economy and Political Philosophy,"

For the existing courses for 1920, substitute the following (which will be applicable to the Previous examination only. The courses for the Final examination for the year are as in 1920):—

**Political Economy and Political Philosophy.**

There will be SEVEN papers in all, out of which any THREE papers may be taken for the M.A. Previous and the remaining FOUR for the M.A. Final. The essay paper shall be taken at the Final Examination only.

**PAPER I—Analytical Economics and History of Economic Theory.**

Books recommended:—

MARSHALL: Principles of Economics.

GIDE AND RIST: History of Economic Thought.

BOHM BAEWORK: Positive Theory of Capital.

CARVER: Distribution of Wealth.

CLARK: Essentials of Economic Theory.

**PAPER II—Economic History of England and India, and Modern Trade History.**

(Students will be expected to show knowledge of the general history of the 19th century, as outlined in such an elementary book as Robinson's Development of Europe, Vol. II).

Books recommended:—

MEREDITH: Economic History of England.

CUNNINGHAM: Commerce and Industry, Vol. II,  
Part II.

ASHLEY: Economic Organisation of England.

TOYENBEE: Industrial Revolution.

ASHLEY: Modern Tariff History.

TAUSSIG: Tariff History of the United States.

CHOLMELY: Protection in Canada and Australia.

R. C. DUTT: India under Early British Rule and  
India in the Victorian Age.

**PAPER III.—Principles and History of Political Philosophy.**

BLUNTSCHLI: Theory of State.

GREEN: Lectures on Political Obligation.

JETHRO BROWN: Underlying Principles of Modern  
Legislation.

DUNNING : History of Political Theories, 2 vols.

E. BARKER : Political Thought from Spencer to to-day.

RANGASWAMI IYENGAR : Some Aspects of Ancient Indian Polity

PAPER IV.—Essay on some Economic or Political Subject.

*Either* GROUP A. ECONOMICS.

PAPER V.—Money, Banking, Prices and Finance, with special reference to India.

CONANT : Principles of Money and Banking.

FISHER : Purchasing Power of Money.

WITHER : Money Changing.

BASTABLE : Public Finance.

GUSTAV COHN : Public Finance.

LAYTON : Introduction to the Study of Prices.

DATTA : Report on High Prices in India.

CHAMBERLAIN : Commission Report on Indian Currency.

Indian Financial Statements from 1906-1917.

PAPER VI.—A special Indian Economic Problem to be studied in greater detail, *e.g.*—

A. Co-operation.

B. The Problem of Indian Manufactures.

C. Indian Agriculture.

D. Transport (including Shipping).

E. Famines.

Note.—The books to be studied for this paper will be announced from time to time, according to the subject which is selected by the University Professor for a particular year.

The subject chosen for the year 1921 is Co-operation, the books recommended being—

WOLFF : Peoples' Banks.

„ : Co-operation in India.

MORMAN : Rural Credits.

**CROSTHWAITE** : Comparative Studies in Co-operation.

Co-operative Credit (Indian Citizen Series).

Maclagan's Report on Co-operation.

Last 3 years' Reports of the working of Co-operative Societies in U. P.

Last three years' Reports of the Proceedings of the Conference of Registrars of Co-operative Societies.

#### PAPER VII.—

*Either* Theory and Practice of Statistics.

Books recommended :—

**BOWLEY** : Elements of Statistics.

**YULE** : Introduction to the Theory of Statistics.

**GIFFEN** : Economic Inquiries and Studies, 2 vols.

*Or* Social, Economic and Labour Problems.

Books recommended :—

**ROWNTREE** : Poverty.

**S. B. WEBB** : Public Organisation of the Labour Market.

**WEBB** : Industrial Democracy.

**GRAHAM** : Socialism, New and Old.

**BUSHILL** : Profit-Sharing and Labour Questions.

**SCHLOSS** : Methods of Industrial Remuneration.

**PIGOU** : Unemployment.

*Or* GROUP B. POLITICAL PHILOSOPHY.

PAPER V.—Constitutional organisation of the British Empire, the Self-Governing Dominions and India.

Books recommended :—

**DICEY** : Law of the Constitution.

**LUCAS** : Historical Geography of the British Colonies.

**KEITH** : Responsible Government in the Dominions.

**BRAND** : Union of South Africa.

**CURTIS** : The Problems of the Commonwealth.

**DURHAM** : Report on Canadian Self-Government.



ILBERT: Government of India.

LEE WARNER: Native States of India.

Report of the last Imperial Conference.

PAPER VI.--International Law with reference to Political and Economic Institutions.

Books recommended :—

HALL: Treatise on International Law.

WESTLAKE: Principles of International Law.

BOSANQUET: International Ideals.

HIGGINS: Hague Peace Conference.

F. E. SMITH: International Law.

PAPER VII—

*Either* Comparative Study of Social and Political Institutions.

MAIN: Ancient Law (Pollock's Edition).

COULANGE: Ancient City.

FISHER: Bonapartism.

CARVER: Sociology and Social Progress.

GIDDINGS: Democracy and Empire.

KIDD: Social Evolution.

RISLEY: Census Report for India, 1901.

*Or* Colonial and Local Government.

REINSCH: Colonial Government and Administration.

LEWIS: Government of Dependenceis.

FAIRLIE: Municipal Administration.

GOODNOW: City Government in U. S. A.

SHAW: Municipal Government in Continental Europe.

P. ASHLEY: English Local Government.

DAWSON: Municipal Life and Government in Germany.

III Under Mathematics (Previous), Paper II,  
For—

(a) “Solid Geometry, as in Bell’s Geometry of  
Three Dimensions,”

Substitute—

“(a) Solid Geometry, as in Charles Smith’s  
Solid Geometry.”

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IV Under Mathematics (Final),

For the existing courses of 1920, substitute the  
following:—

(FINAL).

The Examination shall consist of FOUR papers,  
each of three hours’ duration. Candidates are re-  
quire d to offer Group A and either to take any two  
subjects from Group B, or any two subjects from  
Group C.

GROUP A.

(1) Algebra, Trigonometry and Theory of Equa-  
tions, as in CHRYSTAL’S Algebra, Paper II, Chapter  
XXXI, Chapter XXXV, Arts. 1-18.

HOBSON’S Trigonometry, Chapters XIII-XVIII.

BURNSIDE AND PANTON’S Theory of Equations,  
Part I, and Chapter XIII of Part II.

(2) Analytical Conics and Differential Equations,  
as in SALMON’S Conic Sections, Chapters IV, IX, XIV,  
XIX and Forsyth’s Differential Equations, with vari-  
able co-efficients, solution by definite integrals,  
Jacobi’s Method and partial differential equations  
of the second and higher orders, with variable co-  
efficients.

GROUP B.

(1) Spherical Astronomy, as in Sir R. S. Ball’s  
Treatise on Spherical Astronomy.

(2) Hydrostatics and Hydrodynamics.

(3) Harmonic Analysis, with applications, as in Byerley's, Fourier's Series and Spherical Harmonics.

(4) Dynamical Astronomy, including Lunar and Planetary Theories, as in PLUMMER'S Dynamical Astronomy.

#### GROUP C.

(1) Theory of Aggregates and Theory of Functions of a Real Variable, as in Syllabus given in Schedule A.

(2) Theory of Functions of a Complex Variable, as in BURKARDY'S book (translated by Resor), or in Goursat, Vol. 2, Part 1.

(3) Differential Geometry, as in Syllabus given in Schedule B.

(4) Non-Euclidean Geometry (as in Chapters I-VII, IX and XI-XIV of Coolidge's Non-Euclidean Geometry) and Projective Geometry (as in Cremona's Projective Geometry, or Matthew's Projective Geometry).

*N.B.*—In Coolidge's Non-Euclidean Geometry, those parts of Chapters VIII and X which may be considered absolutely necessary for understanding the twelve Chapters mentioned above, should also be studied.

#### SCHEDULE A.

##### I. *Theory of Aggregates.*

1. Irrational numbers. Cantor's and Dedekind's Theory. Arithmetical Theory of Limits. Convergent sequences.

2. Theory of Aggregates or sets of points.

(a) Definitions :—Limiting point, everywhere dense, dense in itself, closed, perfect, non-dense sets.

(b) Power or Potency of an Aggregate. Enumerable and unenumerable Aggregates, with fundamental theorems about rational, algebraic and real numbers.

- (c) Derivatives of Aggregates. Aggregates of the 1st and 2nd species, and those of the 1st and 2nd category.
- (d) The content and measure of Aggregates.
- (e) Heine-Borel Theorem on sets of intervals.
- (f) Non-dense closed sets.

## II *Theory of functions of a Real Variable.*

### 1. Functions of real variables.

- (a) Continuity of functions of one or two real variables. Uniform continuity. Discontinuities of the 1st and 2nd kind. Pointwise discontinuous functions and totally discontinuous functions.
- (b) Monotone functions, and functions of bounded variation or limited total fluctuation.
- (c) The derivatives of functions. Some important properties of derivatives. Continuous functions not possessing a differential coefficient anywhere, in a given interval. Partial differential co-efficients; cases, in which  $\frac{d^2f}{dx\,dy}$  differs from  $\frac{d^2f}{dy\,dx}$ . Maxima and Minima of one or two real variables.

### 2. Integregation.

Riemann's definition of Integration. Lebesgue's definition of Integration. Important properties of the definite Integral. The fundamental theorem of the Integral Calculus. Mean Value Theorems. Improper Integrals. Definitions of double and repeated integrals. Content and measure of two dimensional sets. Rigorous proof of the rule for Integration by parts.

### 3. Series of Real Variables :—

- (a) Convergence of series. Uniform convergence. Tests of uniform convergence. Continuity of the sum function.

- (b) The Convergence of power series. Product of two series. Taylor's Theorem. Lagrange, Cauchy and Schlomilch's forms for the Remainder in Taylor's Series. Expandibility in Taylor's series.
- (c) Double sequence and double series.
- (d) Differentiation and integration of series.
- (e) Cantor method of condensation of singularities.
- (f) Wierstrass's theorem on the representation of a continuous function by a series of polynomials.

Books suggested for consultation :—

HOBSON : Theory of Functions of a Real Variable  
(Cambridge University Press).

PIERPOINT : Theory of Functions of a Real Variable  
(Ginn & Company, New York).

### SCHEDULE B.

I. Curves in space. Radii of curvature. Torsion. Spherical curvature. Frenet's Formulæ. Moving Trihedron. Some special curves (*e.g.*, the Helix, the Bertrand Curves, etc.).

#### II. Surfaces :

(A) The fundamental forms. The three fundamental differential equations. Gaussian curvature. Asymptotic lines. Lines of curvature. Conjugate lines.

(B) Developable surfaces. Surfaces of constant positive curvature. Surfaces of constant negative curvature. Minimal surfaces. Some other special surfaces.

(C) Orthogonality. Conditions to be satisfied by orthogonal surfaces. Properties of orthogonal surfaces.

- (D) Lines drawn on surfaces. Geodasic lines and their properties, including those relating to curvature. Geodasic triangles. Isothermal lines.

- (E) Quadrature and Cubature.

### M. Sc. EXAMINATION.

*Same as in 1920, with the following alterations:—*

I Courses in Mathematics to be as in M. A. Examination of 1921.

II Courses in Zoology to be as follows:—

#### Zoology.

(PREVIOUS).

The Structure, Development, Bionomics and Distribution in Space and Time of Typical Representatives and other examples, illustrative of the general characters of the principal sub-divisions of the following phyla of the Animal Kingdom:—

Protozoa, Porifera, Coelenterata, Platyhelminthes, Nemertines, Nemathelminthes, Chaetognatha, Annelida, Rotifera, Polyzoa, Brachyopoda, Mollusca, Echinodermata, Enteropneusta, Tunicata, Cephalochorda, Vertebrata.

The following books are suggested:—

1. PARKER AND HASWELL: A Text-book of Zoology, 2 vols.
2. SEDGWICK: Students' Text-book of Zoology, 3 vols.
3. LANKESTER: Treatises on Zoology.
4. The Cambridge Natural History.
5. REYNOLD: Vertebrate Skeleton.
6. FLOWER: Osteology of the Mammalia.

There will be THREE papers, each of three hours' duration.

*Paper 1* will deal with the Comparative Anatomy and Embryology of Non-chordate Groups ;

*Paper 2* will deal with the Comparative Anatomy and Embryology of Chordate ; and

*Paper 3* will deal with the following groups, of which a higher standard would be required :—

Protozoa, Coelenterata, Reptilia.

*Practical Work.*

There will also be a practical test.

All aspects of the subject to be studied, as much as possible, from a practical standpoint.

(FINAL).

The subjects for examination shall be :—

(a) The general principles of Biology, comprising various theories of evolution and the subjects of variation, adaptation, inheritance and sex.

(b) A detailed knowledge of some subject or group to be announced at least one year previous to the date of the examination.

(c) Arthropoda.

There shall be FOUR papers, each of three hours' duration, and there shall also be a practical examination :—

Paper I shall comprise (a) the cell and the leading structural modifications and functional relationships of its constituent parts and (b) the evidences bearing upon the hypothesis of evolution ; general theories of Variation, Heredity and Origin of Species.

Paper II shall deal with Arthropoda, and

Papers III and IV shall deal with the specified subject or group selected.

(Examiners appointed to set papers III and IV, will collaborate to obviate overlapping of questions in the two papers).

*Practical Work.*

A 'Selected Subject' and "Arthropoda" shall be studied, as much as possible, from the practical standpoint. A selected group shall be studied primarily from the local fauna available in the United Provinces, and also from other examples of important types.

III The Special Subject prescribed for M. Sc. Final Examination in Botany, for 1921, is "Metabolic Aspects of the Plant Physiology."

**B. SC. EXAMINATION (ENGINEERING).**

(A) Intermediate (Engineering), Part I.

*(Same as in 1920).*

(B) Intermediate (Engineering), Part II.

There shall be SEVEN papers, as follows:—

Paper I.—Mathematics, I.

Paper II.—Do. II.

Paper III.—Heat Engine.

Paper IV.—Applied Mechanics.

Paper V.—Practical Geometry.

Paper VI.—Electrical Engineering.

Paper VII.—Mechanical Drawing.

Syllabus of Classes to be as in 1920.

**L. T. EXAMINATION.**

*(Same as in 1920).*

**PREVIOUS EXAMINATION IN SAMSKRIT.**

*(Same as in 1920).*

**PRAVESIKA EXAMINATION.**

*(Same as in 1920).*

**MADHYAMA EXAMINATION.**

(FACULTY OF ORIENTAL LEARNING).

*Same as in 1920, with the following alterations:—*

Under "Hindi," for the existing words, substitute;—



“In addition to Composition, the following books shall form the scope of studies :—

1. Hindi Bhashâsâra, Prose, Part I.
2. Kavîtâ Kusum Mâlâ (Indian Press)."

## MADHYAMA EXAMINATION.

(FACULTY OF THEOLOGY).

(*Same as in 1920*).

## SASTRI EXAMINATION.

**Sanskrit Language and Literature (including Vedic Sanskrit).**

There will be ONE paper, of three hours' duration.  
The following books are prescribed :—

(FOR ORDINARY STUDENTS).

Aitareya Brâhmaṇa, Adh. 3 of Pañchikâ 7.

Chhândogyôpaniṣad.

Vâlmikiya Râmâyana, Bâlakâṇḍa.

Mahâbhârata, Anusâsanaparva, Adhs. 1-20.

(FOR STUDENTS TAKING UP JAINA PHILOSOPHY).

Âdipurâṇa,

Sthavirâvalicharita, and

Vâlmikiya Râmâyana (Ayodhya Kâṇḍa).

## Hindi.

In addition to Composition, the following books shall form the scope of studies :—

1. Guptanibandhâvali (Bhâratamitra).
2. Vinaya Patrikâ (Tulsi).
3. Hindi Sâhitya kâ Itihâsa, by Misra Bandhu (small edition).

## A Further Course in Sanskrit Grammar.

There will be SIX papers.

TEXT-BOOKS :—

Paper I—Mahâbhâṣya Navâṇhika.

Paper II—Siddhânta Kaumudî, Svaravaidiki Prakriyâ.

Paper III—Manoramâ, with Śabdaratna (up to Avyayibhâva), or  
Śabdakaustubha (up to Navânhika).

Paper IV—Paribhâṣenduśekhara.

Paper V—Vaiyākaraṇabhūṣaṇa.

Laghumañjûṣâ.

Paper VI—Śabdenduśekhara (up to Avyayibhâva).

### A Further Course in Samskrit Literature.

There will be SIX papers, as follows:—

Paper I—Kâvyaprakâśa.

Paper II—Daśarûpaka.

Râmâyaṇachampû.

Paper III—Piṅgalasûtra.

Prakṛtaprakâśa.

Paper IV—Svapnavâsavadatta.

Mudrârâkṣasa.

Mṛcchhakatika.

Paper V—Naiṣadhacharita (Sargas 1-11, 17).

Paper VI—Kâdambari (Pûrvardha).

### A Further Course in the Vedas and Vedic Samskrit.

Paper I—Sâyana's R̥gvedabhāṣyabhûmikâ  
Charaṇavyûha.

Paper II—Nirukta.

Paper III—R̥gveda Aṣṭaka 1, with Sâyana's Commentary.

Paper IV—Śukla Yajurveda, Adhyâyas 1-20, with  
Mahidharabhâṣya.

Kṛṣṇa Yajurveda, Adhyâyas 1-20, with  
Sâyanaabhâṣya.

Paper V—Satapatha Brâhmaṇa, Kândas 1 and 7.

Paper VI—Bṛihadâraṇyaka Upaniṣad.

## A School of Indian Philosophy.

Students may take up *any one* of the following groups, in each of which there will be six papers:—

### (a) *Purvamimamsa.*

Paper I—Śabarabhāṣya (Adhyāyas 1-6).

Paper II—Tantravārttika, Adh. 1.

Ślokavārttika.

Paper III—Prakaraṇapañchikā.

Paper IV—Nyāyaratnamāla.

Paper V—Sāstradīpikā, 3-12, or

Bhāṭṭadīpikā, 7-12.

Paper VI—Taittirīya Samhitā, Prapāṭhaka I,  
with Bhāṣya.

Taittirīya Brāhmaṇa, Prapāṭhaka I,  
with Bhāṣya.

### (b) *Vedānta.*

Paper I—Brahmasūtra, with Śārīraka Bhāṣya.  
Bhāmati, with Kalpataru-Parimala  
(Chatussūtri only).

Paper II—Daśopaniṣad, with Bhāṣya.

Paper III—Sribhāṣya (Chatussūtri).

Paper IV—Vivaraṇaprameyasamgraha.  
Siddhāntaleśa.

Paper V—Advaitasiddhi-Mithyattwanirukti.  
Chitsukhi, Parichchheda I.

Paper VI—Khaṇḍanakhaṇḍakhādyā Parich-  
chheda 1.

### (c) *Visitadvaita and Dvaita Vedānta.*

Paper I—Brahmasūtra, with Sribhāṣya, or with  
Aṇubhāṣya, or with Nimbārka-  
bhāṣya.

Paper II—Nyāyāmṛta.

Paper III—Śatadūsani.

Daśopaniṣad, with Bhāṣya.

Paper IV—Vedârthatattwasâra.

Tattwamuktâkalâpa.

Paper V—Bhagavadgîtâ, with Ramânuji, or

Jâyatîrthi, or Keśavakaśmiritika.

Brahmasûtra, Śankara Bhâṣya.

(Adhyâyas 1, 2, Padas 1-2).

Paper VI—Nirṇayâmrta.

Mâdhvasiddhântasâra.

**(d) *Prachina Nyaya and Vaisesika.***

Paper I—Gautamasûtra, with Bhâṣya.

Paper II—Vaiśeṣikasûtra, with Prasastapâda  
Bhâṣya.

Paper III—Kusumâñjali (Gadya and Padya).

Paper IV—Sabdasaktiprakâśikâ.

Paper V Śâmânyanirukti-gâdâdhari.

Paper VI—Pakṣatâmathurî.

**(e) *Navya Nyaya and Vaisesika.***

Paper I Śâmânyanirukti-gâdâdhari.

Satpratipakṣa-gâdâdhari.

Paper II—Avayava (up to Pratijnâ lakṣaṇa).

Anumiti (up to Smṛtisamskâra Kâr-  
yakâraṇabhâva).

Paper III—Pakṣatâ-Jâgadiśî.

Tarkamâthurî.

Paper IV—Prâmâṇyavâda-gâdâdhari.

Kusumâñjali (with Haridas's Com-  
mentary).

Paper VII—Vyutpattivâda (I and II).

Śaktivâda.

Paper VIII—Gautamasûtra, with Vrttî.

**(f) *Sankhya and Yoga.***

Paper I—Sânkhyasûtra, with Bhâṣya.

Paper II—Yogasûtra, with Bhaṣyavâchaspatya.

Paper III—Yogavârttikâ.

Śāriraka Bhāṣya (with Bhāmati,  
Adh. 2, Padas 1-2).

Paper IV—Bhagavadgīta, with Gûṇhārtha Dīpikā.  
Kāṭha and Svetâsvatara Upaniṣads,  
with Bhāṣya.

Paper VII—Sarvadarśana Samgraha.

Paper VIII—Devībhāgavata, Skandha 7, from  
Śrīprākriyāvārṇana to Bhakti-  
mahātmyavārṇana.

Srīmadbhāgavata (Kapila-Devahuti-  
samvāda).

Mahābhārata, Sānti Parva (Kapila-  
syumaraśmi Samvāda, up to  
Môkṣadharma Prakaraṇa.

Yogavâśiṣṭha (Vairāgya Prakaraṇa,  
Sargas 1-16).

### (g) *Jaina Philosophy.*

Paper I—Prameyakamalamārtanda (1st half).

Paper II—Prameyakamalamārtanda (2nd half).

Paper III—Aṣṭasahasrī.

Paper IV—Syādvādratnāvatārikā.

Sammatitarka (as far as available).

Paper V—Pañchādhyāyī.

Paper VI—Śaddarśanasamuchchaya (with Ma-  
ñibhadra's Commentary).

### Hindu Law and Jurisprudence.

Paper I—Yajñavalkyasmṛti, Chapters on Vya-  
vahāra and Prāyaschitta, with  
Mitākṣarā.

Paper II—Parāsarasmṛti, Âchārādhyāya (with  
Mādhaviya tīkā).

Viṣṇu, Gautama and Vasiṣṭha Smṛtis.

Paper III—Dattakamîmāmsā—Dattaka Chand-  
rikā.

Paper IV—Śrâddhaviveka, by Rûdradhara, or by  
Sûlapâṇi.

Prâyaschittaviveka, by Sûlapâṇi.

Nirṇayasindhu, 1st Chapter, or

Ragḥunandana's Smrititattwa (उद्वाह-

तिथिमल मासैकादशी शुद्ध्यान्हिक तत्त्वानि),

or Śrâddhachintâmaṇi, Tithi Chintâ-  
maṇi, Vivâdachintâmaṇi.

Paper V—Vyavahâramayûkha.

Dâyabhâga by Jimûtavâhana.

Paper VI—Jaiminiyanyâyamâlâvistara

(Adhyâyas 1-3).

### Hindu Astronomy and Mathematics.

#### EITHER

Paper I—Siddhântaśirômaṇi (Gaṇitâdhyâya).

Paper II—Siddhântaśiromaṇi (Golâdhyâya).

Paper III—Tattwaviveka (2nd half).

Paper IV—Sûryasiddhânta.

Paper V—Rekhâgaṇita, 5, 6, 11 and 12 Adhyâyas  
Ketaki (text).

Paper VI—Chapîyatṛkoṇamîti.

Trkoṇamiti.

Golîya Rekhâgaṇita.

#### OR

Paper I—Jyotirvidâbharṇa.

Paper II—Hâyanaratna.

Paper III—Brihatsamhitâ (prescribed portion).

Paper IV—Vasantarâja.

Paper V—Samarasâra.

Brihajjâtaka.

Paper VI—Jaiminiyasûtra.

Keśavi.

## Ayurvedic System of Medicine, with Botany, Physiology and Chemistry.

Chāṛakasamhitā (prescribed portion).

Suśruta Samhitā.

Vāgbhaṭṭa.

Bhāvaprakāśa.

### (a) *Physiology.*

(Courses not prescribed).

### (b) *Botany.*

(Courses not prescribed).

### (c) *Chemistry.*

(Courses not prescribed).

## History, Paleography and Epigraphy.

Vincent Smith's History of Ancient India, excluding passages containing disparaging remarks on Hindu Religion.

Ashoka Inscriptions.

Gupta Inscriptions.

Bühler's Indian Paleography (with plates).

Roman History, to 476 A.D. } Sanderson's.

Greek History. }

Indian History--Musalman Period.

—British Period.

Kauṭilya's Arthashâstra.

Shukranîti.

Rājataranginî.

Ramacharita (Memoirs: Asiatic Society of Bengal).

Navasahasāṅkacharita.

Vikramāṅkacharita.

Prithvîrâjacharita (Asiatic Society of Bengal).

Harsacharita.

Candidates shall be required to decipher Indian Inscriptions from facsimiles.

## **Prakrit and Pali.**

### **Grammar—**

Kaccayana's Pali Vyakarana.  
Vararûchi's Prâkṛta-Prakâsa.  
Canda's Prâkritalakshaṇa.

### **Prose—**

Jataka-puppha-mala (R. G. Bhadkamkar).  
Upasakadassao (Bibliotheca Indica Edition, by  
Dr. Hoernle).

### **Poetry—**

Dhammapada.  
Kumârapâlacharita.

### **Philosophy—**

Abhidhammatha-Samgraha (Pali Text Society's  
Edition).  
The Six Pāṇḍas of Kundakundacāryya.  
Haribhadra's Saddarsana-Samuccaya, Buddhist  
and Jaina sections only, with Gunaratna's  
Commentary (Bibliotheca Indica Edition).  
E. Müller's Pali Grammar (Phonetics only).

## **English.**

M. A. Course (Hindu University).

## **SMRITIRATNA EXAMINATION.**

Paper I—R̥gveda (Aṣṭakas 1-4), with Bhâṣya,  
or Yajurveda (Adhyāyas 1-20),  
with Bhâṣya, or Sāmaveda, with  
Bhâṣya (गानम् उत्तरार्चिकम्).

Paper II—Gr̥hyasûtra (of the candidate's own  
Śākhā), with Mantrārtha.

Paper III—Prâtisākhya (of the candidate's own  
Śākhā).

Siddhântākaumudī (Svaravaidikī).

Sārvānukramasûtra.

Paper IV—Nirukta (Adhyāyas 1, 2, 6, 7).



Paper V—Yājñavalkyasmṛti, Âchârkâṇḍa, with  
Mitākṣara.

Paper VI—Âgneya Purâṇa, Pratistha Kunda-  
mandapabhâga.

Paper VII—Prasthânabheda, by Madhûsudana  
Sarasvati.

Tarkasamgraha, with Dipikâ.

Mîmâmsâparibhâṣâ.

Paper VIII—Śāyana's Rgvedôpôdghâta.

Paper IX—Bhagavadgîtâ, with Śrîdharîṭika.

### DHARMASASTRI EXAMINATION.

As for Smritiratna, and, in addition, the fol-  
lowing :

Paper X—(1) Brâhmaṇa (of the candidate's  
own Śâkhâ), with *svara* (text  
only).

Paper XI—(2) Darśapûrṇamâsapaddhati (of the  
candidate's own Śâkhâ).

Śrautasûtra (Somântam). (of the  
candidate's own Śâkhâ).

Paper XII—(3) Grhyasûtra (with mantrârtha)  
(of the candidate's own Śâkhâ).  
Śulvasûtra.

Kundaratnâvalî.

Jaṭapaṭala.

## **Appendix A.**

### **IMPORTANT DATES.**

#### **(A) GENERAL.**

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Proposal to establish a Hindu University at Benares first put forward at a meeting at Benares 1904.

First Prospectus published... 1905.

Scheme considered and approved by the Congress of Hindu Religion at Allahabad ... 1906.

Hindu University Society registered ... October, 1911.

The Benares Hindu University Act (Act XVI of 1915) passed 1st October, 1915.

The Act came into force ... 1st April, 1916.

Construction of Buildings begun ... 1918.

Foundation-stone laid by His Excellency Lord Hardinge, Viceroy and Governor-General of India ... 4th February, 1916.

The Central Hindu College deemed to be a College maintained by the University, under Section 15 of Act XVI of 1915 ... 1st October, 1917.

Colleges of Oriental Learning and Theology started ... July, 1918.

'Teachers' Training College started ... 15th August, 1918.

Engineering College opened 1919.

First Examinations of the  
University held ... 1918.

Ceremony of turning the first  
sod of the University canal by  
His Highness the Maharaja of  
Benares ... 14th December, 1920.

Central Hindu College removed  
to new buildings at Nagwa ... August, 1921.

Meeting of the first Court ... 12th August, 1916.

First Annual Meeting of the  
Court ... 29th and 30th  
October, 1917.

Second Annual Meeting of  
the Court ... 30th November, 1918.

Third Annual Meeting of the  
Court ... 29th November, 1919.

Fourth Annual Meeting of  
the Court ... 30th November and  
11th and 12th De-  
cember, 1920

Fifth Annual Meeting of the  
Court ... 30th November and  
14th December, '21.

First Convocation for confer-  
ring degrees ... 17th January, 1919.

Second ,, ,, ... 24th January, 1920.

Third ,, ,, ... 23rd April, 1921.

Fourth ,, ,, ... 14th December, 1921.

Special Convocation for con-  
ferring the degree of Doctor of  
Letters on His Royal Highness  
the Prince of Wales ... 13th December, 1921.

Opening ceremony of the  
New Buildings at Nagwa by His  
Royal Highness the Prince of  
Wales ... 13th December, 1921

## (B.) EXAMINATIONS.

1918.

Intermediate Examination of	
1918 commences	... 12th March, 1918.
B. A. and B. Sc.	„ „ ... 26th March, 1918.
M. A. and M. Sc.	„ „ ... 22nd July, 1918.
Pravesika	„ „ ... 22nd July, 1918.

1919.

Admission, Intermediate,	
B.A. and B.Sc. and L. T. Ex-	
aminations, commence	... 21st April, 1919.
Praveshika Examination com-	
mences	... 28th April, 1919.
M. A. and M. Sc. Examina-	
tions commence	... 21st July, 1919.
Previous Examination in	
Sanskrit held	... 1st December, 1919.

1920.

Admission and Pravesika	
Examinations of 1920 commence	15th March, 1920.
Intermediate Examination	
commences	... 30th March, 1920.
B. A. , B. Sc., M. A., M. Sc.	
and Madhyama Examinations	
commence	... 12th April, 1920.
L. T. Examination commences	19th April, 1920.
Intermediate Examination	
(Engineering), Part I, commen-	
ces	... 26th April, 1920.
Previous Examination in	
Sanskrit held	... 1st March and 9th
	October, 1920.

*and* 1921.

Admission, Pravesika and	
<del>Madhyama</del> Examinations com-	
mence	... 14th March, 1921.

Intermediate, B. A. and B.Sc.

Examinations commence ... 4th April, 1921.

M. A., M. Sc., L. T. & Shastri

Examinations commence ... 18th April, 1921.

Intermediate (Engineering),

Parts I and II, Examinations

begin ... 2nd May, 1921,

Previous Examination in } 10th January and  
Sanskrit held } 24th October, 1921

1922.

Admission and Praveshika

Examinations begin ... 20th March, 1922.

Intermediate, Madhyama,

B. A., B.Sc., & L. T. Examinations

begin ... 3rd April, 1922.

M. A. and M. Sc. (Prev. and

Final), Shastri and Int. (Engineer-

ing), Parts I and II, and B. Sc.

(Engineering), Part I Examina-

tion begin ... 17th April, 1922.

Previous Examination in } 18th January and  
Sanskrit } 27th February, 1922.

## Appendix B.

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### THE FOUNDATION-STONE LAYING CEREMONY.

The ceremony of laying the foundation-stone of the Benares Hindu University was performed by His Excellency Lord Hardinge, Viceroy and Governor-General of India, on 4th February, 1916.

A huge pandal was erected, and it was tastefully decorated with yellow and purple hangings and many flags; while palms and other pot plants were arranged on the steps leading to the dais, and all round the amphitheatre. The dais in the centre where the foundation-stone was placed was also very prettily decorated. During the fortnight preceding, as well as on the four days succeeding, *i. e.*, up to Vasanta Pañchamî, the 8th February, various special Hindu rites and ceremonies, Vâstu-pûjâ, Rudra-Yâga, Gâyatri-Japa, Veda-pâtha, *etc.*, were performed day after day under the direction of Mahamahopadhyaya Pandit Adityaram Bhattacharya, Pandit Ambâdâsa Shastri, Pandit Padmanâbha Shastri, and other distinguished Pandits.

Long before the time appointed for the ceremony, a large crowd began to assemble in the pandal, and by 11-30 a. m. almost every seat in the amphitheatre was occupied. Guards of Honour from the Fifth Hampshires and Seventh Rajputs, stood in a semicircle at the foot of the dais on which were the seats of the Viceroy and other distinguished guests, while the Central Hindu College Cadet Corps stood round three sides of the small dais where the foundation-stone was placed. The unflinching endu-

rance shown by the latter, who stood in the full glare of the midday sun, for almost two hours, without one of them giving way (when eight of the Fifth Hampshire and four of the Seventh Rajputs became unconscious under the heat, and had to be carried away by the C. H. C. Ambulance Corps and the Police Ambulance Corps), speaks well for the training they had received. For this feat, they were especially complimented, later on, by H. H. the Mahârâjâ of Bikaner.

Exactly at noon, the Guards of Honour presented arms, and the band played the opening bars of the National Anthem, as His Excellency the Viceroy entered and took his seat.

On His Excellency's right hand were seated: -

1. Major-General His Highness Maharaja Sir Partab Singhji Bahadur, G.C.S.I., G.C.I.E., Maharaja of Jammu and Kashmir,

2. His Highness Raj Rajeshwar Maharajadhiraja Sir Sumer Singhji Bahadur, Maharaja of Jodhpur,

3. Colonel His Highness Raj Rajeshwar Narendra Shiromani Shri Maharajadhiraja Sir Ganga Singh Bahadur, G.C.S.I., G.C.I.E., LL.D., A.D.C., Maharaja of Bikaner,

4. Major His Highness Maharao Sir Umed Singh Bahadur, G.C.S.I., G.C.I.E., Maharao of Kotah,

5. Major His Highness Maharajadhiraja Sir Madan Singhji Bahadur, K.C.S.I., K.C.I.E., Maharaja of Kishengarh,

6. His Highness Sawai Maharaja Sir Jai Singhji Bahadur, K.C.S.I., K.C.I.E., Maharaja of Alwar,

7. His Highness Maharawal Shri Sir Bijey Singhji Sahib Bahadur, K.C.I.E., Maharawal of Dungarpur,

8. His Highness Maharaja Lokendra Govind Singh Bahadur, Maharaja of Datia,

9. His Highness Maharaja Sir Prabhu Narain Singh Bahadur, G.C.I.E., Maharaja of Benares,

10. His Highness Raj-Rana Sir Bhawani Singh Bahadur, K.C.S.I., Raj-Rana of Jhalawar,

11. His Highness Maharaja Ripudaman Singh Malwandar Bahadur, F.R.G.S., M.R.A.S., Maharaja of Nabha, and

12. The Raja of Sohawal.

While on his left hand were :--

1. His Excellency Lord Carmichael, Governor of Bengal,

2. His Honour Sir James Meston, Lieutenant-Governor of the United Provinces of Agra and Oudh,

3. His Honour Sir Michael O'Dwyer, Lieutenant-Governor of the Punjab,

4. His Honour Sir Edward Gait, Lieutenant-Governor of Bihar and Orissa,

5. Sir Sankaran Nair, Kt.,

6. His Highness Maharaja Sir Rameshwar Singh Bahadur, K.C.S.I., Maharaja of Darbhanga,

7. Sardar Daljit Singh,

8. The Hon'ble Dr. Sundar Lal Rai Bahadur, B.A., LL.D., C.I.E.,

9. Dr. Deva Prasad Sarvadhikari,

10. Sir Gooroodas Banerji, Kt.,

11. The Hon'ble Pandit Madan Mohan Malaviya, B.A., LL.B.,

12. The Hon'ble Maharaja Sir Bhagwati Prasad Singh Bahadur, K.C.I.E., Maharaja of Balrampur,

13. Sir Prabha Shankar Dalpat Ram Pattani, and

14. Seth Narottam Morarji Gokul Das.

In the blocks of seats beyond these on both sides were many other distinguished guests, Legislators, titular Râjas and Mahârâjâs, Mahâmahopâdhyâyas, Shams-ul-ulamas, Principals of Colleges, a large gathering of the Trustees and Donors of the Benares Hindu University, who had come together from all parts of the country, and all the most distinguished residents of Benares.



As the notes of the National Anthem died away, twelve little girls from the Central Hindu College Girls' School, who were under the guidance of the Principal, Miss L. Edger, M. A., and were stationed on the steps leading down from the Viceregal chair into the amphitheatre, chanted a short Sanskrit invocation, first to Ganapati, and then to the Goddess Sarasvatī, a very fitting opening to the ceremony. The great Pandit, Mahamahopadhyaya Shiva Kumar Shâstri, then came forward and uttered svastī-vâchana shlokas, words of prayer for the blessing of God upon the work about to be performed, after which the Mahârâjâ of Darbhanga, as President of the Hindu University Society, read the following address :

#### THE HINDU UNIVERSITY SOCIETY'S ADDRESS.

"MAY IT PLEASE YOUR EXCELLENCY,

"It is my proud privilege to-day to respectfully offer to Your Excellency, on behalf of the Hindu University Society, a most cordial welcome to this ancient Seat of Learning, and to express our fervent gratitude for your gracious acceptance of our invitation to lay the Foundation-Stone of the Hindu University, which will ever remain associated, in the minds of the Indian People, with a Viceroy whose generous support and sympathetic encouragement have contributed so much to the realization of the earnest hopes and aspirations of Hindu India, which will now take concrete shape in this Institution.

"The history of the movement for the establishment of the University, is briefly told. It carries us back to the year 1904, when, at a meeting held under the presidency of His Highness the Mahârâjâ of Benares, the proposal to found a Hindu University was first put forward. The idea took some years to mature, and led, in 1911, to the formation of the

Hindu University Society, which was registered under that name. The Society was successful in obtaining the very next year, through the support of Your Excellency's Government, the approval of His Majesty's Secretary of State for India of the proposal to establish a teaching and residential University on the lines proposed. A short period of a little over two years, spent in the discussion of details, saw the Benares Hindu University Bill passed into law and placed on the Statute Book of the land on the first of October, 1915.

"It is a source of deep gratification that the idea has effectively touched the hearts of the people of the land. The great and noble Princes, the landed gentry and the general public, have all come forward as one body to generously support the movement. Their contributions to the University Funds now amount to close upon one crore of rupees, including the capitalised value of the annual grants, sanctioned by Ruling Princes, to which Your Excellency's Government has been pleased to add an annual grant of a lakh of rupees. The selection of a suitable site, affording full facilities for the ever-progressive development of a great University, growing and expanding with the growth of ideas and ideals, as well as of the multifarious demands and needs of modern life and its many-sided activities, was the first measure which engaged the attention of the Society, and the site on which we are assembled to-day, extending over more than 1200 acres, was selected after much consideration.

"The incorporation of the Central Hindu College in the new University had been contemplated from the beginning, and, thanks to the ready co-operation of Mrs. Annie Besant and the other Trustees of the College, whose labour of love and devotion had built up that institution, the College has been

transferred to the Society to serve as the nucleus of the University. The movement reaches its culminating point to-day, when we are met to witness the Foundation of the University being laid by Your Excellency.

“The reasons which demanded the establishment of such a University may also be briefly stated. It is impossible to recall the state of education which existed in India at the beginning of the British rule and compare it with the stage it has now reached, without a sense of deep gratitude to the Government which has brought about this momentous change. Great also is our indebtedness to our existing Universities which have contributed in so large a measure to the diffusion of higher education among our people. But these Universities are, at present, mainly examining bodies, and there is an ever-growing consensus of opinion that those Universities alone can best discharge their high functions and fulfil their mission which teach as well as examine, which impart not only literary but also scientific and technical education, combined with research, and which mould the character of their alumni by helping them to live their academic life in healthy environments, under the personal influence and loving care of good and capable teachers.

“There was another equally powerful reason for inaugurating this movement. While we highly appreciate the value and need of education in European Arts and Sciences, we cannot divest ourselves of the consciousness that we have inherited a culture and civilization of our own, which reaches further back in time than that of any other people, and which possesses, as we believe, in a special degree the elements of social stability as well as the fundamental principles of physical, intellectual and spiritual progress and well are. Amidst all the vicissitudes

through which Hindu society has passed, it has, in all essentials, clung to that civilization and has ever been governed by it. There was naturally a widespread desire in our community that we should have a central educational institution of our own, to preserve and promote our distinctive civilization and culture, and to instruct our youth in the sacred precepts of our religion. The promoters of the University believe that if our students are brought up in our traditions and culture and instructed in the precepts of our religion, they will grow up into men of vigorous intellects and high character, who love their Motherland, are loyal to the King, and are in every way fit to be useful members of the community and worthy citizens of a great Empire.

“Deep, therefore, is our gratitude and great our joy that, under the dispensation of a benign Providence, with the generous support of the Suzerain Power of the Rulers of Indian States, and of the public, we witness here to-day the foundation of a great Institution, which seeks to combine the usefulness and efficiency of the modern system of education, with the high spiritual ideals of ancient India.

“This auspicious day will ever remain memorable in the history of our country. Never before perhaps in that history did the highest representative of the Sovereign and the Rulers of so many States and Provinces meet to co-operate with the people to bring into existence an educational institution like the proposed University. The gratitude that we feel towards Your Excellency is too deep for words, for our success is in the largest measure due to the generous sympathy and support which the movement has received at Your Excellency's hands. Nor should we omit to express our obligations to the Hon'ble Sir Harcourt Butler for his valued advice and friendly

help at every important step in our progress. We are also deeply thankful to the Rulers of Provinces and Indian States, who have honoured and encouraged us by their presence. Equally grateful are we to the distinguished scholars and educationists, who have, by so kindly responding to our invitation, given us an assurance of their guidance and co-operation in the great task that lies before us of building up an Ideal University and making it in every way worthy of the continued patronage and support of all well-wishers of this land.

“We take this opportunity of expressing our gratitude to all subscribers to the funds of the University, particularly to Ruling Princes and other principal donors, who have helped us with liberal contributions.

“Time will not permit of our mentioning the names even of all donors of large sums, but we may be allowed especially to express our obligations to His Highness the Maharana of Udaipur, His Highness the Maharaja Gaekwad of Baroda, His Highness the Maharaja of Mysore, His Highness the Maharaja of Jammu and Kashmir, His Highness the Maharaja of Jodhpur, His Highness the Maharaja of Jaipur, His Highness the Maharaja Scindia of Gwalior, His Highness the Maharaja Holkar of Indore, His Highness the Maharaja of <sup>Bikaner</sup> ~~Kotah~~, His Highness the Maharaja of <sup>Kotah</sup> ~~Bikaner~~, His Highness the Maharaja of Kishengarh, His Highness the Maharaja of Alwar, His Highness the Maharaja of Nabha, His Highness the Maharaja of Benares, His Highness the Maharaja of Kapurthala, His Highness the Raj Rana of Jhalawar, His Highness the Maharaja of Datia among the Ruling Princes, and to the Hon'ble Maharaja of Darbhanga, the Hon'ble Maharaja of Cossimbazar, Sir Rash Behari Ghose, Thakur Suraj Bakhsh Singh of Sitapur, Babu Brajendra

Kishore Roy Choudhury, the Hon'ble Babu Moti Chand and Dr. Sunder Lal, who have each contributed one lakh or more to the funds of the University.

“We also desire to thank the Government of India for the handsome grant of one lakh a year. We fully realize that we require a much larger sum than we have yet been able to secure. But we have every hope that the generous public will help us with all the funds we need to build up this new and great Temple of Learning.

“Your Excellency's administration, which we are grieved to think is drawing to a close, will ever be memorable for the spirit of true and active sympathy with our national sentiments and aspirations and for an earnest endeavour to appreciate and satisfy popular needs. Many are the wise and beneficent measures which have distinguished Your Excellency's Viceroyalty.

“Among these, the support you have given to the cause of education, in general, and of higher education, in particular, the inauguration of residential and teaching Universities and the liberalization of educational policy by sanctioning the establishment of a private University, will stand out conspicuous and be gratefully cherished in the memory of the people. These measures have won for Your Excellency the deep admiration and grateful affection of all classes and sections of the community, and have secured for you a highly honoured place in the history of our land. As a memento of the deep and kindly interest which Your Excellency has taken in the Hindu University, the Jodhpur Darbar have endowed a Chair of Technology, with an endowment of Rs. 24,000 a year, which they and we desire to associate with your honoured name, and we crave Your Excellency's permission to

our doing so. That endowment will, we hope, serve as a nucleus for the development of the Faculty of Technology of the University in the near future.

“We are also deeply indebted to His Honour Sir James Meston for the keen personal interest he has taken in our work; and we take this opportunity of expressing our gratitude both to him and to the officers of the Government for the invaluable assistance and co-operation we have received from them in making the requisite arrangements for this function.

“We cannot conclude without giving special expression of our gratitude to H. H. the Maharaja Sir Prabhu Narain Singh of Benares for the paternal interest he has taken in and the fostering support he has always extended, from the very beginning of its life, to the Central Hindu College and to the scheme of the University itself, and last but not least for the liberality of his co-operation in arranging for the reception of our distinguished and honoured guest on this occasion.

“I now humbly request Your Excellency to be pleased to perform the great ceremony which has brought us here to-day, and we fervently pray to the God of all Nations that he may bless the great work Your Excellency is about to inaugurate, so that it may fulfil, in ever greater and greater measure, its pure and noble purpose of welding together the noblest culture of the East and of the West, and that He may vouchsafe health and happiness to Your Excellency, peace and prosperity to this ancient land and to the great Empire of which it forms a part, and long life, glory, and power to the noble and gracious King-Emperor who rules over this Empire.”

The address was placed in a beautifully engraved silver casket, fashioned to represent a temple of

Shiva, and was presented to His Excellency by Sir Gooroodas Banerji. The Viceroy then made the following reply :

#### H. E. THE VICEROY'S REPLY.

“ It has seldom fallen to my lot to address a more distinguished gathering than that which I see before me to-day, including, as it does, the Governor of Bengal, a constellation of Lieutenant-Governors, a veritable galaxy of Ruling Princes, and so much of the flower of India's intellect. What is it that has brought together this brilliant assemblage from so many distant parts of Hindustan ? What is the lode-stone that is exerting so powerful an influence ? It is there in front of us, a fine block of marble, but little different in outward appearance from many others that I have helped to set in their places during the past five years. But, in spite of its apparent simplicity, it possesses a deep significance, for it betokens a new departure in the history of education in India, and one that has attracted the most intense interest on the part of all good and thoughtful Hindus. This foundation-stone will mark a definite step in the advance towards an ideal that has stirred to its very depths the imagination of India. The demand for enlightenment and educational progress grows ever stronger, and the ceremony we are gathered here to perform offers some small response to that demand and may perhaps pave the way for its more rapid fulfilment. To such an audience as I have before me here, it is unnecessary to enlarge upon the need for providing greater facilities for University education in this country. We all know or have heard of the pressure that exists in our existing University centres ; of the enlargement of classes to unwieldy dimensions to admit of the inclusion of the ever-increasing number of students ; of the



melancholy wanderings of applicants for entrance from college to college when all colleges were already full to overflowing. There is a great division of opinion between the advocates of quantity and the advocates of quality, and there is much to be said for both. The charge is frequently brought against Government that they are too eager for quality and too ready to ignore the demand for quantity, and comparisons are made, that do not lack force, between the number of Universities in England, America, and other countries, and the number available to the 300 millions of India. Nevertheless, it is the declared policy of the Government of India to do all within their power and within their means to multiply the number of Universities throughout India, realizing, as we do, that the greatest boon Government can give to India is the diffusion of higher education through the creation of new Universities. Many, many more are needed, but the new Universities to be established at Dacca, Benares and Bankipore, soon to be followed, I hope, by Universities in Burma and the Central Provinces, may be regarded as steps taken in the right direction. Here, at any rate, in this city, is a case where we can all stand together upon a common platform, for no one can dispute that the Benares Hindu University will add to the facilities for higher education and relieve to some extent the pressure of existing institutions, while it is the proud boast of at least one of those who have so successfully engineered this movement, that the degrees of the Benares Hindu University shall be not only not lower but higher in standard than those of existing Universities. It has even been claimed that this University will only justify its existence when the education given within its precincts shall make it unnecessary for Indian students to go to foreign

countries for their studies, and when such expeditions will be limited to advanced scholars and professors, who will travel abroad to exchange ideas with the doctors and learned men of other Continents, in order to make the latest researches, in all branches of knowledge available to their own alumni at Benares.

“That is a great and noble aim ; and if it is fulfilled, as I hope it may be, this University will satisfy the claims alike of quantity and quality ; and I think all will admit that Government have not been backward to give their co-operation and assistance to a scheme so full of promise. But this University is going to do something more than merely increase the existing facilities for higher education. Its constitution embodies principles that are new to India, in that this is to be a teaching and residential, as contrasted with an affiliating and examining, University. I am not ignorant that these principles have already secured general acceptance from most thoughtful men, but they were not fully recognized when our older Universities were established, and they can only be partially applied to their constitutions. Perhaps I was wrong to say that these principles are new to India, for though in ancient times there was nothing quite like a modern University, its prototype may be dimly discerned in the far distant past, and the tradition that comes down to us is one of thousands of students gathered round such great teachers as Vashishtha and Gautama ; and, indeed, the whole Indian idea of education is wrapped up in the conception of a group of pupils surrounding their “guru” in loving reverence, and not only imbibing the words of wisdom that fall from his lips, but also looking up to him for guidance in religion and morality and moulding their characters in accordance with his precept and example. To this

and similar schemes my Government have consistently given their support, and I and my advisers came to the conclusion at an early stage in the history of the movement that it would be wrong and impolitic on the part of Government to resist the desire shown by the Hindu and Muhammadan communities of India to inaugurate special Universities of this new type. But, whether the idea of a residential teaching University be new or old, there is no doubt that it is a departure from the existing model, nor is this the only departure that characterises this enterprise. Indeed, I do not myself think that, important as the distinction may be, it is going to have so great an influence upon generations yet unborn as that other departure that the constitution of this institution embodies, and that is indeed of the very essence of its creation. I mean its denominational character. There are some who shudder at the very word 'denominational,' and some who dislike new departure of any kind. Controversy has raged round such points in England, and educational problems have a way of stirring up more feeling than almost any other social question. I do not think this is unnatural; for their importance cannot be exaggerated. If you realize that the object of an educational system must be to draw out from every man and woman the very best that is in them, so that their talents may be developed to their fullest capacity, not only for their individual fulfilment of themselves, but also for the benefit of the society of which they find themselves members—if you realize this, is it not well that men should strive with might and main to obtain and be content with only the very best, and is it not natural that the strife should produce a mighty clash of opinion and conviction?

“ But the questions at issue cannot be settled by theory and discussion. Education is not an exact

science, and never will be. We must also have experiment; and I for one consider that Lord Ripon was a sagacious man when he deprecated that the educational system of this country should be cast in one common mould,"and advocated, as he was never tired of doing, that variety which alone, he urged, can secure the free development of every side and every aspect of national character. I should like to remind you, too, that this new departure of a denominational University is not quite such a novel idea as some of you may think, for the Education Commission appointed by Lord Ripon, while recognizing that the declared neutrality of the State forbids its connecting the institutions directly maintained by it with any one form of faith, suggested the establishment of institutions of widely different types, in which might be inculcated such forms of faith as the various sections of the community may accept as desirable for the formation of character and the awakening of thought. They recognized the danger that a denominational college runs some risk of confining its benefits to a particular section of the community, and thus of deepening the lines of difference already existing. But I am not terrified by the bogey of religious intolerance; rather do I think that a deep belief in and reverence for one's own religion ought to foster a spirit of respect for the religious convictions of others; and signs are not wanting that the day is dawning, when tolerance and mutual goodwill shall take the place of fanaticism and hatred. That Commission touched with unerring finger the weakest spot in our existing system; for, though something may be done by mental and moral discipline and something by the precept and example of professors, these are but shifting sands upon which to build character, without the foundation of religious teaching

and the steady influence of a religious atmosphere. My own personal conviction, strengthened by what I have seen in other lands, is that education without religion is of but little worth. That, then, is the great idea that has brought you all together to witness the ceremonial inception of this experiment. Here, you hope, in the not far distant future, to see preserved and fostered all that is best in Hindu ideals of life and thought; all that is noblest of Hindu religion and tradition, culture and civilization, and grafted upon that tree, healthy and strong in its own natural soil, you hope to see growing in it and of it, all that is good and great of Western science, industry, and art, so that your young men may go forth, not only inspired with pure and noble ideals, but also equipped for the development of their mother country along the more material lines of progress and prosperity.

“As regards the actual constitution, this has been a matter of prolonged negotiation with the promoters of the University movement and with the Secretary of State. Into the history of the negotiations it is not necessary for me to enter. I need merely observe that my Government have throughout been animated by one main purpose, to leave the greatest possible freedom to the University, consistent with its development on such safe and sound lines as would be approved generally by the Hindu community. I feel confident that the promoters of this scheme will zealously see to the right conduct of this institution. I am glad to think that I shall leave the University in the capable and sympathetic hands of Sir James Meston, who is your first Visitor. The position of Visitor is one of dignity and influence, and I know that you will always be able to rely on Sir James Meston for wise help and sound advice. We have not arrived at the present stage without a considerable

amount of effort and hard work, and I should like to take this opportunity of expressing my high appreciation of the zealous, but reasonable, spirit in which the Maharaja of Darbhanga, Pandit Madan Mohan Malaviya, Dr. Sunder Lal, and others, on behalf of the promoters of the University, conducted negotiations with Sir Harcourt Butler as representing the Government of India, to whose great tact and conciliatory attitude I believe the promoters of the scheme would pay as high an eulogy as I wish to pay myself, and thus enabled the measure which gives birth to this institution to be passed through my Council in time of war as a non-controversial measure. I also tender my most hearty congratulations to the Maharaja of Darbhanga, Pandit Madan Mohan Malaviya, and other members of the deputation that spent so much time and labour in enlisting the sympathy and generosity of their countrymen for this scheme. I watched with the greatest interest their wanderings from city to city, and noted the welcome they everywhere received and the enthusiasm of their audiences. "Heaven helps those that help themselves;" and the result is that they have succeeded in collecting a sum that guarantees a commencement upon a sound financial footing, and justifies us in taking to-day this first step towards putting the scheme into material shape. We have heard the names of many of those who have contributed with princely liberality to make this possible, and the Benares Hindu University should never forget how much she owes to the Ruling Chiefs of India. But much more will be required in the future to secure the early completion of all the requisite buildings, and I trust that the generosity of the great Hindu community may be like an ever-flowing stream to feed this Fount of Learning. What will be wanted even more than money, is really competent professors

and teachers ; so let me make this appeal to the whole of Hindu India to send her best men from every quarter here, so that they may help to create a true University atmosphere, and thus make this great experiment a great success. The Act which we passed last October has still to be put into force, and I am glad to announce that the necessary steps are being taken to do so at an early date. I trust that when the University has been thus brought into legal existence, every care will be taken to proceed with due deliberation and circumspection, so as to ensure that the quality of the instruction given and the surroundings in which it is imparted, may be worthy of the great position which this University aspires to attain.

“To my friend, His Highness the Maharaja of Benares, special gratitude is due, for not only does the Central Hindu College, which is to form part of the nucleus of the new University, owe much of its life and inception to him, but he is also making concessions in connection with the acquisition of the land for this great new experiment ; and where could a Hindu University be more happily placed than here in Benares, the ancient Seat of Learning, clustered about with a thousand sacred associations ? Here, if anywhere, should be found that religious atmosphere which seems to me so essential to the formation of character, and here, if anywhere, the genius of modern progress will be purified by the spirit of ancient culture. But it is my earnest hope that those who have done so much to bring this scheme to fruition, will not now rest upon their oars. For the moment, provision will be made by the transfer of the existing Arts, Science, and Oriental Departments of the Central Hindu College to the University, so that facilities for teaching these subjects may be supplied. I understand also that His Highness the Maharaja of Jodh-

pur, in addition to a lump sum grant, has promised an annual grant of Rs. 24,000, which may render possible the inauguration of the study of some special technical subject. And I accede with pleasure and pride to the request that has just been made that my name should be associated with the Chair of Technology, which it is proposed to found with that endowment. But, I trust, you will not let your ambitions be satisfied with this, but will steadily keep before you the aim of creating Colleges or Departments of Science, of Agriculture, and Commerce, and Medicine, so that the Benares Hindu University may be a place of many-sided activities, prepared to equip young men for all the various walks of life that go to the constitution of modern society ; able to lead their countrymen in the path of progress ; skilled to achieve new conquests in the realms of science, art, industry, and social well-being, and armed with the knowledge as well as the character so essential for the development of the abundant natural resources of India. Let it be our prayer that this stone may contain within it the germs of all that is good and beautiful and wise for the enrichment of the educational system of India, the enlightenment and happiness of her people, and the glory of God."

After this, His Excellency went to the central Dais, amidst a shower of flowers from the little girls, and performed the ceremony of laying the foundation-stone, which had the following inscriptions on it :--

ॐ

## काशीविश्वविद्यालयः ।

माघे शुक्ले प्रतिपदि तिथौ शुक्रवारे शिवाया

न्यासे कार्यां ह्यगनवमहीसम्मिते विक्रमाब्दे ।

प्राञ्चं धर्मं परिफलितुं विश्वविद्यालयस्या-

कार्षीत् सम्राट्प्रतिनिधिवरो लार्डहार्डिङ् सुकीर्तिः ॥



## BENARES HINDU UNIVERSITY.

THIS FOUNDATION-STONE WAS LAID

BY H. E. THE RIGHT HONORABLE  
CHARLES BARON HARDINGE OF PENSHURST,  
P.C., G.C.B., G.M.S.I., G.C.M.G., G.M.I.E., G.C.V.O., I.S.O.,  
VICEROY AND GOVERNOR-GENERAL OF INDIA,  
FEBRUARY 4, 1916.

In a cavity, under the marble stone, is a copper box, containing current coins of the British Government and of various Indian States, copies of the Reports of the H. U. S., that day's issue of *The Leader* and *The Pioneer*, and a large copper-plate with the following inscription :—

ॐ

काशीविश्वविद्यालयस्य

ताम्रपत्रलेखः ।

ॐ

धर्मं सनातनं वीक्ष्य कालवेगेन पीडितम् ।  
भूतले दुर्व्यवस्थं च व्याकुलं मानवं कुलम् ॥  
कलेः पञ्चसहस्राब्दे गते भारतभूमिषु ।  
आरोपयितुमुद्गारबीजमस्य पुनर्नवम् ॥  
काशीक्षेत्रे पवित्रेऽत्र गंगातीरे महोदया ।  
शुभेच्छा पुण्यसंपन्ना संजाता जगदात्मनः ।  
संगमय्याथ पाश्चात्याः प्राच्याश्चापि प्रजा निजाः ।  
तच्छ्रेष्ठानां विधायैकमस्य सुमतिलक्ष्णम् ॥  
विश्वनाथपुरे विश्वजनीनो विश्वभावनः ।  
विश्वात्माऽऽकारयद्विश्वविद्यापीठव्यवस्थितिम् ॥  
निमित्तमात्रमत्राभूत् समीहायाः परेशितुः ।  
मालवीयो देशभक्तो विप्रो मदनमोहनः ॥  
निधाय बाङ्ग-मयं तेजस्स्मिन्नुद्बोध्य भारतम् ।  
प्रद्वीकृत्यापि तच्छास्तृनस्मिन्नर्थे व्यघातप्रभुः ॥

अन्ये चापि निमित्तानि प्राभवन्नन्तरात्मनः ।  
 बीकानेरनृपो वीरो गंगासिंहो महामनाः ॥  
 श्रीरमेश्वरसिंहश्च दरभंगामहीपतिः ।  
 प्रधानः कार्यकारिण्याः सभाया मानवर्धनः ॥  
 सुधीः सुन्दरलालश्च मन्त्री कोषाभिरक्षकः ।  
 गुरुदासादित्यरामौ वासंती वाग्मिनी तथा ॥  
 तथा रासविहारी च वृद्धा ये देशवत्सलाः ।  
 दासाश्चान्ये भगवतो यथाशक्यं सिधेविरे ॥  
 विक्टोरियामहाराज्ञाः पौत्र एड्वर्डदेहजे ।  
 सम्राजि पंचमे ज्यार्जे भारतं परिशासति ॥  
 मेवारकाशिकाशमीरमयसूरात्स्वराधिपान् ।  
 कोटाजयपुरेन्दौरजोधपूरादिभूमिपान् ॥  
 तथा कर्पूरलानाभाग्वाजेरादिनरेश्वरान् ।  
 ईरयित्वा सहायार्थं सज्जनानपरान्स्तथा ॥  
 गर्भस्य सर्वधर्माणां रक्षायै प्रचयाय च ।  
 प्रसाराय स्वलीलानां स एवैकः परः प्रभुः ॥  
 जार्ड हार्डिङ् सुविख्यातं सम्राट्प्रतिनिधिं वरम् ।  
 धीरं वीरं प्रजाबन्धुं जनानां हृदयंगमम् ॥  
 विश्वविद्यालयस्यास्य शिलान्यासे न्ययोजयत् ॥  
 संप्राप्ते नेत्रभूद्ग्रहधरणिमिते वैक्रमेऽब्दे च मासे .  
 माघे पक्षे च शुक्ले प्रतिपदि च तिथा  
 वह्नि शुक्ले क्षणेऽच्छे ।  
 श्रीकाश्यां श्रीजसम्राट्प्रतिनिधिकरतो  
 यच्छिला-न्यास आसीद्  
 यावच्चन्द्रार्कतारं विलसतु स महा-  
 विश्वविद्यालयोऽयम् ॥  
 सरस्वती श्रुतिमहती महीयताम्  
 ततः स्नुता ज्ञानसुधा निपीयताम् ।  
 सदा मतिः शुभचरिते विधीयताम्  
 रतिः परा परमगुरौ प्रचीयताम् ॥

The following is the English translation of the inscription :—

“The Universal Spirit beheld the Ancient Law of Righteous Living oppressed and cast into disorder by the rush of Time, and the Family of the Children of the Manu, dwelling on this Earth, disorganized and unsettled, when five thousand years of the age of Kali had passed over the land of Bhârata-varṣha.

“Then Blessed Mercy arose in the Supreme Mind, and the Auspicious Will, from which emanate great glories, to plant anew the seed of renovation of that Ancient Law and Organization in the holy soil of Kâshî, on the banks of the sacred stream of Gangâ.

“And the Creator and Benefactor of the World, the Universal Soul moving in all, brought together His Children of the East and of the West, and induced their minds to that unanimity which meaneth good and right understanding, and directed them to raise this Home of Universal Learning in the Capital Town of the Lord of the Universe.

“The prime instrument of the Divine Will in this work was the Malaviya Brâhmaṇa, Madana Mohana, lover of his motherland. Unto him the Lord gave the gift of Speech, and awakened India with his voice, and induced the leaders and the rulers of the people unto this End.

“And other instruments also the Supreme fashioned for His purpose—the high-minded and valiant Gangâ Sinha, Ruler of Bikaneer ; the noble Rameshvara Sinha, lord of the lands of Darbhanga, the President of the Assembly of Workers and bringer to it of honour ; the wise counsellor, Sundar Lal, learned in the law, the storer of the treasures and the keeper of the secrets ; and sages like Guru Dâsa and Râsa Vihârî and Âḍitya Râma, and also the lady Vâsanṭî of the silver tongue, Elders of the land, full of ten-

derness for the younger generation. And other Servants of the Lord served in many ways.

“And so in the time when George V, son of Edward VII, and grandson of the Great Queen Victoria, was Overlord of the land of Bhârata, the Supreme Spirit moved the Rulers of Mewâr, Kâshî, Kâshmir, Mysore, Alwar, Kotâ, Jaipur, Indore, Jodhpur, Kapurthâlâ, Nâbhâ, Gwalior, and many other good-hearted men, of noble and gentle birth, and of high and low degree, to help in the work of preserving the vital Seed of all Religions, for future great growth and development anew, and for the enactment of the Dramas of ever new Civilizations which infinitesimally express His boundless Glories. And He inspired the Emperor George’s excellent, great-souled and courageous Viceregent in India, Lord Hardinge, a true Elder of the people, and dear to their hearts, to lay the Foundation of this Home of all Learning.

“At an auspicious moment, near noon, on Friday, the 1st day of the Light-half of Mâgha, in the Vikrama Year 1972, this Foundation is laid by the hand of the good-hearted Viceory of the King; may this Institution prosper, therefore, and grow and increase while the Sun, Moon and Stars shine and circle in the heavens.

“May Sarasvatî, incarnate in the Shruti-Heart of Wisdom, ever bloom and shine with worship from her human children; may they ever assiduously imbibe the vital milk of knowledge flowing from her sweet breasts of Science and Philosophy; may all minds turn to acts of good alone; and may all hearts be filled with Love of the Supreme!”

AMEN ! AUM !

When His Excellency had returned to his seat, six Pandits chanted the Shântipâṭha, calling down the blessings of the gods and praying for the successful

accomplishment of the undertaking. The Maharaja of Bikaner then read a short address of thanks to the Viceroy, and the Maharaja of Jodhpur garlanded him, after which the Viceregal party left the amphitheatre, proceeding to Ramnagar, where the Maharaja of Benares entertained them at luncheon along with many distinguished guests. During the days following, many lectures of extreme interest were delivered at the Central Hindu College, in connection with this unique function, cricket matches were played and various other activities carried out.

### LECTURES.

The following were the principal lectures delivered on the occasion :—

1. "Agricultural Co-operation in Denmark," by Rai Chandika Prasad Sahib.

2. "A Plea for a Faculty of Technology in the Hindu University," by principal C. H. Vora of the Baroda Technological Institute.

3. "Commerce and Commercial Education," by the Hon'ble Mr. Lallubhai Samaldas.

4. "Agriculture as a Profession," by Rai Ganga-ram Bahadur.

5. "The Economic Development of Indian Agriculture," by Professor Sam Higginbottom.

6. "From the Voiced to the Unvoiced," by Dr. J. C. Bose.

7. "A Message from a Student of Science," by Dr. P. C. Roy.

8. "Agriculture in Modern Universities," by Dr. Harold Mann.

9. "The University as a Builder of Character" by Mrs. Annie Besant.

10. Lecture by Mr. M. K. Gandhi.

11. "Mathematics," by Professor C. V. Raman.

12. "Progress of Medicine during the Last Century," by Lt.-Col. Kirtikar.

13. "Ayurveda," by Kaviraj Gananath Sen.
14. "Value of Samskrit Education," by Mahamahopadhyaya Pandit Hara Prasad Shastri.
15. "Indian Culture," by Pandit Shri Krishna Joshi.
16. "The Ideals of Modern University," by Professor P. Geddes.
17. "Indian Music," by Mr. O. N. Bhatkhande.
18. "Religious Education at the University," by Pandit Din Dayal Sharma.
19. "Some New Paths in Physics," by Professor C. V. Raman.

The lectures were attended by a very large gathering, numbering usually from three to four thousand, and were of the deepest interest, since the lecturers were all experts in their own particular subjects, and several of them were men of world-wide renown.

#### THE MAHARAJA OF BIKANER.

The first day, February 5th, was devoted to the subjects of Agriculture, Technology, and Commerce. H. H. the Mahārājā of Bikaner presided at these lectures, and, in his opening address, he reminded his hearers of the fame which was attained by India in the past for her manufactures and commerce. Though she has now fallen far below that high standard, there is no reason why she should not regain her old position; brain-power, combined with earnest and continuous efforts, will surely lead to success, and the first thing needed for this is the opportunity of receiving a commercial education on sound and up-to-date lines. This need, it is to be hoped, will be supplied by a Faculty of Commerce in the new University. With regard to Agriculture, it is mainly co-operation that is needed, and he laid some stress on the importance of forming Co-operative Societies. He then called on Rai Chandika

Prasad Saheb to deliver his lecture on "Agricultural Co-operation in Denmark."

RAI CHANDIKA PRASAD SAHIB.

The lecturer described the many successes achieved by the Danish people as a result of their introduction of co-operative principles in agriculture, and drew the conclusion that an adoption of those principles in India is sure to do much towards ameliorating the condition of our agriculturists, who are always in debt. He said that the average income of an agriculturist in India is not above Rs. 20 a year, while his expenses go up to Rs. 35. So a deficit of Rs. 15 has to be made up by loan. This difficulty might, at least, be partially removed by co-operation. In Denmark, the co-operative concerns also check the rise of prices. For example, the price of milk is fixed; and, even if much more milk is to be supplied on some particular occasion, they adopt special methods to obtain more milk for the time being from the same number of cows, by feeding them on medicinal grasses, *etc.*

PRINCIPAL C. H. VORA.

This lecture was followed by a paper, entitled, "A Plea for a Faculty of Technology in the Hindu University," by Principal C. H. Vora of the Baroda Technological Institute. In the course of his paper, Principal Vora laid some stress on the inspiration to be derived from the ancient traditions of a cultured people like the Indians, an inspiration which should be strong in the new University. He also expressed his hope that the new University, being a teaching and residential institution, as distinguished from the five examining Universities already existing, would be a real Temple of Learning; and that, in the course of the present century, many other similar institutions would rise through the length and breadth of the country.

**THE HON'BLE MR. LALLUBHAI SAMALDAS.**

In the evening, three more lectures were delivered. The Hon'ble Mr. Lallubhai Samaldas first spoke on "Commerce and Commercial Education," and gave a brief description of the commerce that was carried on in India in Vedic and Purāṇic times. We read of gold coins, of sailors and ships, of merchants trading with foreign countries. In society there was a separate class whose occupation was trade and agriculture, while in the ancient Indian Government there was a special Member for Commerce. Mr. Lallubhai suggested the appointment of a committee, consisting of local commercial men and also educationists, to consider and submit a report of the steps that should be taken, in order to introduce a Faculty of Commerce in the Hindu University.

**RAI GANGARAM BAHADUR.**

After this lecture, Rai Gangaram Bahadur spoke on "Agriculture as a Profession." He is a practical man, being the founder and successful organizer of an agricultural business in the Punjab, his native province. He said that mass education is no doubt a great necessity ; but what is even more important is that we should make an effort to remove famine. India being an agricultural country, it is by agriculture alone that we can do this. He is in favour of adopting modern improved methods in agriculture, and he said he had himself achieved success, both by irrigation and by cultivation, in a province where the soil is less fertile than that of the United Provinces ; and if any one would begin similar agricultural undertakings in these provinces, he would surely get much greater results. One great requisite is to consider, for what kind of crop any particular district is best suited. The Himalayan region, for example, is suitable for producing nuts ; and, similarly, every province or a part of it is better suited to some particular kind



or kinds of crops. We must also stop the export of bones, and utilise them as manure. Lastly, he said that our students should not go to the University without any particular aim, as they so often do at present, and that those who aim at agriculture as their profession, should lose no opportunity of gathering information and experience, thus expanding their sphere of knowledge and outlook and obtaining a liberal education, and should then study agriculture, not only to gain knowledge as to what other countries are doing, but also with the motive of improving agriculture in their own country, and, where necessary, adopting the methods of other countries to suit the conditions of their own land.

PROFESSOR SAM HIGGINBOTTOM.

Prof. Higginbottom then read his very interesting paper on "The Economic Development of Indian Agriculture." His sympathy for the Indian people was first aroused by the heart-rending sight of their extreme poverty, and he felt that the only way in which he could do some service to India was by trying to develop Indian Agriculture. He is hopeful of a great and real development, for he says India has greater advantages than either America or Europe. He compared the conditions of America specially with those of this country. For fully six months of the year, the fields in America are covered with snow, but in India cultivation is possible all the year round. Moreover, the cost of cattle is very moderate. The three things needed, he said, are the heart to feel, the head to think, and the hand to work. The great defect in India is lack of organization and of scientific methods. He referred to the previous speaker, Rai Gangaram Bahadur, and said that bone is not the only substance that should not be exported, but that, in his opinion, oil and ghee also should be kept and utilized for the country. He pointed out

that, although India is such a poor country, yet, at the same time, its methods are more extravagant than those of most countries. Even the cowdung is used as fuel instead of being utilized for manure. •

• \* \*

On the morning of the 6th, there were three most interesting lectures by Dr. J. C. Bose, Dr. P. C. Roy and Dr. Harold Mann. His Highness the Râj Râna of Jhalawar, who presided, spoke in the highest terms of that morning's lecturers. He began by quoting the well-known Samskrit passage, स्वदेशे पूज्यते राजा विद्वान् सर्वत्र पूज्यते, and said it was his proud privilege to preside at the lectures of such distinguished men.

DR. J. C. BOSE.

The subject of Dr. J. C. Bose's lecture was "From the Voiced to the Unvoiced." He began by pointing out that, just as every living organism, in order to maintain its life and growth, must be in free communion with all the forces of the universe about it, and must not only constantly receive stimulus from without, but must also give it out from within itself, so also the intellectual life of a nation must both receive stimulus from the outside world and also give out of its own life to others, in order that the life may continue to be healthy. Applying this to the intellectual life of India, he showed that the vitality and inspiring influence of a new Indian University depends on its attainment of a world status, by the intrinsic value of great contributions made by Indian scholars for the furtherance of the world's knowledge. There are two necessary elements for the gaining of new knowledge : first, there must be a strong scientific imagination, which can glimpse the goal to be aimed at, can intuitively recognize a truth which has not yet been proved, thus providing the motive for research, and determining the line along which investigation must be carried

on ; then must follow the patient, rigid, experimentation, whereby every step towards the goal must be conclusively demonstrated. Dr. Bose considers that the cause of the comparative want of success in scientific investigation in India, in more recent times, is the want of due recognition of the experimental side. But, on the other hand, India is pre-eminently fitted for investigation as regards the other necessary factor ; for, an Indian enquirer has not only a burning imagination which can extort truth out of a mass of apparently disconnected facts, but also the habit of meditation, whereby the mental vision is kept clear and steady. And that any deficiency in the former essential can be readily made good, has been sufficiently proved by his experience in his own laboratory, and by the fact that even in America it has been found impossible to reproduce the instruments with which his experiments were made, and therefore many requests have been received from the different Universities of Europe and America for the supply of duplicates of the instruments from his laboratory. As for the nature of the contribution that India can make to the knowledge of the world, Dr. Bose considers that the Indian mind is specially fitted to realize a wide synthesis of knowledge and to establish a great generalization, not merely speculative, but based on an actual demonstration of an underlying unity amidst bewildering diversity, to establish, in short, by experiment and demonstration, that there are not *sciences*, but a *single science*, including all branches of knowledge. He then gave a brief but most interesting account of some of his own investigations into the unity of life, which, we may add, have undoubtedly opened up the way to the attainment of the great purpose which he suggests for Indian scientists. In closing his lecture, he asked if these investigations should remain the offering of an individual worker, to come

to an end with him, or, if there should not rather arise a school of science, that will maintain a continuous and living tradition of India's gifts to the world in this realm of knowledge. He is full of hope that this shall be so, for "there is something in the Hindu culture which is possessed of extraordinary latent strength, by which it has resisted the ravages of time and the destructive changes which have swept over the earth. And, indeed, a capacity to endure through infinite transformations must be innate in that mighty civilization, which has seen the intellectual culture of the Nile Valley, of Assyria, and of Babylon wax and wane and disappear, and which to-day gazes on the future with the same invincible faith with which she met the past."

Dr. P. C. Roy.

Dr. P. C. Roy opened his lecture, entitled, "A Message from a Student of Science," with the following words:—

"I confess, as a Hindu, I am overwhelmed with feelings which I can scarcely give vent to on rising to speak from a platform in this city.

"Benares, Varanasi or Kashi, hallowed with the associations of a glorious past, has been the cradle of a civilization dating almost from prehistoric times. While Rome and Athens had barely sprung into existence, she—the epitome and embodiment of Hindu thought and culture—had developed a literature and promulgated a philosophy which still rank as unrivalled.

"There is a belief current among the Hindus that no earthquake can overtake this sacred city; let the Geologist and the Seismologist find out if there is any foundation for this belief. Figuratively, however, it conveys a lesson which forces itself upon us. Dynasty has followed dynasty; revolution has come in the wake of revolution; foreign and mighty con-

querors from far and near have come and gone, but Benares has heeded not these upheavals—she has stood unmoved as if these have been no concern of hers. Life glides on as smoothly, here to-day as it did three thousand years ago. Yes, this Eternal City is a living monument of the vitality of the Hindu nation and of the immobility of the East. Political disturbances and upheavals have scarcely left any impressions upon her.”

He then referred to the association of Benares with the origin and foundation of the surgical branch of medicine, and the tradition that Dhanvantari descended on earth in the person of Divodâsa, King of Kâshî, teacher of Susruta. Whether this be true or not in its literal interpretation, there is no doubt that Benares was the birthplace of Susruta. In more recent times, the city was the seat of mathematical and astronomical learning, as is shown by the Mâna-Mandir Observatory, erected by Râjâ Jai Singh, under whose auspices also Pandit Jagannath translated Euclid and Napier's Logarithm into Samskrit ; while in our own times the tradition for learning has been kept up by Pandits Bâpudeva Sastri and Sudhâkara Dvivedi. There was also considerable interchange of thought between the East and West, especially at Alexandria. Many Musalmân students flocked to India also, to learn the sciences there first-hand, during the eighth and ninth centuries, and they carried this learning to Europe at the time of the incursions of the Arabs into that country. But after about the twelfth century, the time of the Renaissance in Europe, the intellectual activity in India began to decline ; and thus it has become possible for Europe now to do something towards repaying her debt. “ The whole of Asia is astir and instinct with new aspirations, and pulsating with new life. It will not

do for us tenaciously to hug the past and live like the proverbial frog in the well. We should invoke the liberal and catholic spirit of Varâhamihira and learn at the feet of Western teachers.

“Every devout Hindu pilgrim to Benares makes it a point to drink of the *Jnâna Vâpi* or “Well of Knowledge.” I trust, the new University will be a veritable *Jnâna Vâpi* to the students who will flock here from the distant parts of India. To me it has been a source of sincere gratification that ample provision has been made for teaching the different branches of science and of original research. I hope the starting of this University will inaugurate a new era, and, I trust, it will be a sacred confluence of the ideals of the East and the West and will play a prominent part in the building of the India of the future.

“This is my brief and humble message.”

DR. HAROLD MANN.

Dr. Harold H. Mann, in treating his subject, “Agriculture in Modern Universities,” regretted that, although all distinguished Universities of the world are attaching so much importance to agriculture, the Indian Universities are yet very slow in recognizing it as a subject to be included in their curriculum. A few weeks ago, when he was proposing a development of the agricultural courses in the Bombay University—the only Indian University which up to the present has even acknowledged the existence of agriculture—a leading Judge of the High Court opposed his motion with a doubt whether it was advisable to recognize agriculture at all. A University, he considered, was for the development of intellectual pursuits. Dr. Mann thinks that behind the reluctance to include agricultural studies in a University course is the idea that they are mercenary, that they are taken up

with the idea, not of advancing knowledge, but of making money. But this is by no means necessarily the case. The ideal of a Modern University should be the service of mankind; and, surely, the improvement of agriculture is one very important way of serving. To a large number of the people around us agriculture is life itself, while to all of us the failure of agriculture means death; and its improvement implies an increased possibility of material advancement, which in many cases makes moral progress possible. Those, then, who devote themselves to agricultural study as a line of service to their fellows, will find that they have chosen a path not only worthy of their intellectual powers, but also worthy of the ideals of service which is the highest aim of a University. While philosophy and law, medicine and the art of government--and even the science of war--undoubtedly, need the best thought of the wisest men, it should be remembered that the art of producing the food whereby the whole world is maintained, is also worthy of our attention and consideration. It is a matter for regret that, while agriculture has improved so greatly in all other countries of the world, the methods adopted in India to-day scarcely differ from those of untold centuries ago. The lecturer, therefore, pleaded for the inclusion of the agricultural studies in the new Hindu University and in any other which aims at realizing the widest and highest ideals.

MRS. ANNIE BESANT.

In the evening, the Mahârâjâ Bahadur of Darbhanga presided, and Mrs. Annie Besant was the first speaker. She took as her subject, "The University as a Builder of Character." Speaking of the ideals of the Hindu University, she said it would have no right to call itself a Hindu University, if its main object was to train youths for the gaining of pros-

perity and wealth. For Hinduism, while recognizing the claims of the intellect, proclaimed above all the supremacy of the spirit. The first great ideal of the Hindu University, therefore, is to take up the great Hindu culture, and enrich it, but not supplant it, with all that the other civilizations can give. She laid great stress on the principle that knowledge is a trust, and not a possession, and, referring to this, she cited a story of Dr. J. C. Bose. When he went to England, it was found that his Calcutta experiments in wireless telegraphy would make the prosperity of the Wireless Telegraphy Company impossible, unless they took a patent of his ideas, and they therefore offered him money so that he might give them his knowledge for the benefit of the Company. What did Dr. Bose answer? He said:—"I will never sell knowledge; I will tomorrow give to the world everything that I have discovered by my investigation." To a Hindu, to think of knowledge as a source of gain is sacrilege. One ideal, therefore, of the University must be to love knowledge for knowledge's sake. But the foundation on which the University must rest, the only stable foundation, is religion. For it is here that the youths will be trained who are to become the makers of India. Great, then, is the responsibility of those who will teach in this University; great is their privilege, but heavy also their responsibility. For here will be the future scientists, the future great politicians, the future leaders of the country. We should, therefore, she said, lift up our hearts in prayer to Ishvara, that He may pour down upon this University the blessings of knowledge, of order, of patriotism, so that it may be a centre not only of learning but also of high morality, and of devotion to the Motherland.

After Mrs. Besant had concluded her eloquent speech, the Chairman requested Mr. M. K. Gandhi to speak to the meeting.



## MR. M. K. GANDHI.

Addressing himself mainly to the students, Mr. Gandhi spoke to the intent that, while many people in India were not unnaturally desirous of Self-Government, yet they did not all quite realize that we must first deserve and then desire, that we must make ourselves morally, mentally, and physically clean and fit, before we aspired after Self-Government, and that when we were thus clean and fit by achievement of the inner Self-Government, we should get the outer one without fail, it would come to us of itself without any one having to be asked for it or having to give it to us; and as an instance, near at hand, of our lack of readiness in this respect, he mentioned the dirty condition of the lanes of Benares at what should be its cleanest spot, the Central Heart of the Sacred Town, the site of the Temple of Vishvanâth. He went on to point out various inconsistencies, as they appeared to him, in the national and the individual life of India, in a manner partly humorous and partly serious: and especially urged the students to be frank, honest and truthful, to have the courage of their convictions, to profess and do honorable principles and deeds openly and honorably, and, above every thing else, to carefully avoid the taint of all that was cowardly and despicable, like skulking anarchism and secret assassination—the introduction of which by a few misguided criminals into the life of the country, as a supposed remedy for various grievances, instead of open, honorable and constitutional passive resistance, had only brought upon the people, in its evil train, the greater evils, and widespread humiliations from a C. I. D., which, in the nature of things, found it difficult to discriminate between the very many law-abiding and the very few lawless, and could not help subjecting all alike to degrading suspicions and espionage.

On the 7th of February, the Mahârâjâ Bahâdur of Kasimbazar presided over the morning lectures.

PROFESSOR C. V. RAMAN.

Professor C. V. Raman delivered an interesting lecture on Mathematics, in which he traced the early history of Mathematics in India to the days of Āryabhatta, and dwelt on the importance of the study of Mathematics which is pre-eminently the science of sciences. We need not look to foreign countries for inspiration; it is enough if we look to the glorious past of our own country; for it was in India that numerical figures were invented, and that the decimal system of notation originated. In the course of his lecture, Mr. Raman gave some description of his own researches in physics, whereby he discovered some new paths. An account of these was being published in the Journal of the Indian Society for the Cultivation of Science, which was founded by the late Dr. Mahendra Lal Sarkar, and which provides a unique field for scientific and mathematical research workers in Calcutta.

Lt.-COL. KIRTIKAR.

Lieutenant-Colonel Kirtikar gave a discourse on the "Progress of Medicine during the Last Century." He had at first studied the Western systems of medicine and gained a thorough knowledge of them; but, being somewhat disappointed with the result, had subsequently studied the Ayurveda, in which ancient system he had found the solution of many of his problems. He considers that the ancient Indian systems of medicine and surgery are more beneficial to Indians than Western methods can be.

KAVIRAJ GANANATH SEN.

The subject of the Ayurveda was continued in the evening, when Kaviraj Gananath Sen, M. A.,

read a very interesting paper under the presidency of the Raj Rana of Jhalawar. He quoted passages from Charaka, to the effect that the ideal of those who practise medicine should not be any personal gain, but the loving and sympathetic service of suffering humanity, an ideal which is still followed by innumerable village - Kavirajas and Hakims throughout the length and breadth of India. In the Ayurvedic system there are many branches, such as surgery, treatment of the eye, the nose, *etc.*, the treatment of mental diseases, cure of snake-bite and other poisonous wounds, *etc.*; nor does it confine itself to the human kingdom, but deals also with the treatment of the diseases of plants and animals; one branch, for instance, is concerned with the treatment of elephants! The lecturer made an eloquent appeal to the Hindu University to endeavour to revive the ancient glories of the Ayurveda, and expressed his hope that a time may come when a band of students will devote themselves to the discovery of other Ayurvedic Granthas that may be lying in MS., hidden away in unknown places.

Immediately after this lecture, two valuable and interesting lectures on Samskr̥t and Hindu culture were delivered under the Presidentship of the Maharaja of Alwar. The Maharaja's opening address was in Hindi, and was much appreciated by the audience. He pointed out that, as "the heart of India, through all these rolling centuries, has chosen the path of Dharma," and as Dharma can be truly known only through the study of the Scriptures in the original, it is necessary, above all things, that the study of Samskr̥t should be revived; and, he hoped, this would be one of the special features of the Hindu University. He gave practical expression to his hope by the announcement that his State, in addition to the subscription already given, would give a chair for Samskrit litera-

ture and philosophy at a cost of Rs. 12,000 annually, for five years.

The two lectures that followed were by Mahamahopadhyaya Pandit Haraprasad Shastri on the "Value of Samskr̥t Education;" and by Pandit Sri Krishna Joshi on "Indian Culture."

The 8th of February saw the close of the University lectures, as also of the other functions, in connection with the laying of the Foundation-Stone. H. H. the Maharaja of Nabha presided over the morning lectures, the first of which was by Prof. Geddes on the "Ideals of a Modern University."

#### PROF. P. GEDDES.

In the course of his address, Prof. Geddes said that India's own University should bear India's own stamp, and should not merely copy from foreign Universities. The ideal of a University is to build character, to make a person strong in moral force. We need not be dazzled by the sight of the well-endowed, magnificent Universities of America and Europe, many of which, in the learned lecturer's opinion, are but moral and intellectual vacuums! In ancient days, whether in India or in Greece, or other ancient countries [and, we may add, in Paris and Oxford, as late as the eleventh and twelfth centuries A.D.], a centre of learning, a true University, was formed, from a very small beginning, with a single teacher, perhaps, surrounded by a small group of students. Gradually, their number grew, other teachers joined and students were attracted to come and place themselves under their guidance. In modern times, the splendour is great, but real education or development of character is poor. Prof. Geddes laid great stress on the formation of libraries in various departments, reserving room for expansion. His lecture was full of suggestions, and was highly appreciated,

so much so that the Hon'ble Pandit Madan Mohan Malaviya rose immediately after, and thanked Prof. Geddes on behalf of the Hindu community, expressing his hope that he would help the University from time to time with his suggestions, and, if possible, in some more direct way also.

MR. O. N. BHATKHANDE.

Mr. O. N. Bhatkhande then read a very interesting paper on "Indian Music."

At 3 P.M., the Sikh *Grantha Saheb* was recited by Bhai Arjun Singhji and Sant Attar Singhji at the School Hall, where, after the recitation, Pandit Madan Mohan Malaviya spoke in Hindi, on the Hindu Religion in general and Guru Granth Saheb in particular.

PANDIT DIN DAYAL SHARMA AND PANDIT M. M.  
MALAVIYA.

After this, at 4-30, the afternoon meeting began at the College Hall, as usual. Pandit Din Dayal Sharma addressed the meeting in Hindi, on the subject of "Religious Education at the University." Pandit Madan Mohan Malaviya followed with an English address to the students, in which he appealed to them to do their utmost for the building up of the University, as it was on their enthusiasm, love, and self-sacrifice that its success must depend.

PROF. C. V. RAMAN.

Prof. C. V. Raman then gave another interesting discourse on "Some New Paths in Physics," illustrated by magic lantern slides.

This most interesting and successful series of meetings was then brought to a fitting close, with a Hari Kirtan by Pandit Ram Chandra Boa, and some

music by Prof. Vishnu Digambar and two of his pupils.

As the 8th February was Vasant Panchamî, a Sarasvatî Pújâ, on a grand scale, was performed at the Nagwa site, where also the Yajñâ and the chanting of 24 lakhs of Gáyâtrî mantram, which had been begun a fortnight before, were brought to a close.

## APPENDIX C.

*Ceremony of the Opening of the New Buildings of the University by His Royal Highness the Prince of Wales and the Special Convocation for conferring the degree of Doctor of Letters on His Royal Highness.*

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The Benares Hindu University made grand preparations for the visit of His Royal Highness the Prince of Wales on its grounds, where an amphitheatre accommodating 10,000 persons was specially erected for the purpose. Exactly at 11 A.M., on the 13th December, 1921, the Prince arrived at the University, where he was received by Colonel His Highness Maharaja Sir Krishnaraja Wadiyar Bahadur, G.C.I.E., Maharaja of Mysore, Chancellor, Pandit Madan Mohan Malaviya, B.A., LL.B., Vice-Chancellor, Principal A. B. Dhruva, M.A., LL.B., Pro-Vice-Chancellor and Rai Ganga Ram Bahadur, M.V.O., C.I.E., Chief Engineer of the University. A procession, consisting of the Chancellor and other officers of the University and the staff of the Prince, led His Royal Highness to the *dais*, where had assembled members of the Court and the Senate of the University and other distinguished visitors. Their Highnesses the Maharajas of Alwar and Benares were also present. The proceedings began with a prayer.

His Highness the Chancellor, in delivering a speech, welcoming the Prince and requesting him to declare the buildings open, said :—

YOUR ROYAL HIGHNESS,

“ It is my proud privilege, as Chancellor of the Benares Hindu University, to preside at this important function when the University is honouring itself by conferring its highest degree on the illustrious Heir to the British Throne and to extend on behalf of the University, which represents in a special degree the whole of Hindu India, a loyal and enthusiastic welcome to Your Royal Highness.

“ Your Highnesses, ladies and gentlemen, it is a time-honoured custom as well as a valued privilege for a University to honour, by the conferment of degrees, Royal personages and men of eminent learning or distinction in public life. But this Special Convocation for conferring the Doctor's degree of the University on his Royal Highness has even a deeper meaning, for it is a token of love and homage offered to the representative of her sovereign and to her future emperor, by a Hindu University, in the holy city of the Hindus. Benares was a seat of learning when the ancient Kingdom of Taxila was young; and now twentyfive centuries later, a University in the same city is striving to establish that intellectual bond between the East and West which Taxila initiated and on which depend today the hopes of the future of the Indian race. From early Buddhist times onwards, Benares has received the visit of princes and members of royal houses who came as students and departed as doctors; but the present visit of a Prince, in whom is centred the devotion of the many peoples and nations of the greatest empire in history, is the most memorable of all in the annals of this venerable city. It is but fitting that



this University, as the repository of Hindu tradition in the religious capital of the Hindus should accord its royal welcome and its tribute of affection to the Prince who comes as the representative of his august father and whose visit at this critical juncture, in the evolution of India's national life, is a touching token of our beloved King-Emperor's genuine love for his Indian people, of his solicitude for their well-being and of his deep sympathy with their constitutional advance and progress a proof, of "that one touch of nature which makes the whole world kin," and is the golden link which binds man to man and nation to nation. And here, Your Royal Highness, I recall with pride and admiration what is written large in the annals of your tour through different continents and among peoples of various races that gift of true sympathy and comradeship which has enabled Your Royal Highness with perfect ease and naturalness to be a Canadian to Canadians and an Australian to Australians—fit representative of a world empire which is, in truth, a league of many dominions and nations. It is for this reason that Your Royal Highness's tours have evoked a universal welcome like that which we offer to the sun and winds, a welcome springing from the human heart which never fails to be touched by those manly and generous qualities which are so conspicuous in Your Royal Highness. Your Royal Highness has not only consented to receive an honorary degree from this University, but has graciously undertaken to open the University buildings. I need not go into the history of the inauguration of the Benares Hindu University, but I would like to emphasize that the object with which it was founded was to preserve and popularise the best thought and culture of the Hindus and all that was good and great in the ancient civilization of India, as well as to diffuse the highest

teachings of the progressive West, in art and science, among the youth of this country; in other words, to combine the best of the West with the best of the East, and we regard it as a happy augury for the fulfilment of this object, that Your Royal Highness should come as a noble representative of the West to co-operate with us in starting the University in its new home and becoming one of its honoured alumni. Your Royal Highness is familiar with the renowned Universities of Oxford and Cambridge and with other great modern Universities of Europe and America. Although our infant University can bear no comparison with these, its elder sisters, in its endowments, equipment and record of achievements, nevertheless, for the very reason that it is young, it yields to none of them in its passionate desire to provide itself with the means of promoting the highest learning and research; and, as the child is father to the man, even so, we hope that the Benares Hindu University will, under divine providence, develop in time into an institution worthy of the educational history and traditions of this ancient land. I now request Your Royal Highness to declare these buildings open."

His Royal Highness then, addressing the assembly and declaring the buildings open, said :—

Mr. Chancellor and Gentlemen,

"I thank you for asking me to this ceremony today and for the high honour which you are about to confer on me by giving me a degree of your University and making me one of yourselves. I might enlarge on the theme of the great responsibilities of those who are entrusted with the good government of this University and of the staff, whose teaching will mould future generations in India; but not so many years have passed since I was at the University

myself as one of the taught and not as one of the teaching. So it is to the students in particular of this great foundation that I will address my remarks.

“This city has an honoured name for learning; but your University differs from the older Universities like Oxford and Cambridge because they have centuries of fair traditions behind them. The latter can claim, despite the changes of time and fashion, to have established an atmosphere which still attracts the young men of Great Britain and the Empire in each succeeding generation and which is justly regarded as setting a special stamp on the mind and character.

“If I can communicate to you today something of what I felt as an undergraduate about my University, it may help you in your careers and make you still prouder of your University, of which, I am sure, you are already proud.

“I think all English University men look back on their time at the University as the happiest years of their lives. When they go up, they have left behind them for the first time the sheltered care of home and the narrow discipline and limited experience of school life. They are for the first time out in the world. It is a world full of interest; full of splendid possibilities; everything is fresh; there has been no time to get tired of anything or to be disillusioned. The mind and spirits are in their most enthusiastic and receptive stage. Unhampered by doubts, they can definitely pronounce each thing as good or bad, and take or leave it. They readily receive the direct appeal to the imagination of fine ideas or of high standards of character and conduct. They have a delightful intimacy with hundreds of youngmen similarly situated out of which lifelong friendships spring up.

“As the terms went by, we undergraduates began to feel the unseen presence of those who had left our college and made good in the world. Their influence was with us in our daily round—hundreds of them—men who had been undergraduates like ourselves, who had played in the same parks, who had rowed on the same river, who had attended the same lecture halls, who had worshipped in the same chapel. They had left the college and the Varsity. They had gone out into the world to become great statesmen or soldiers, poets or painters, writers or divines, men of science or learning, pioneers in industry or commerce. These were the men who had helped to make the Empire and helped to make us proud of it. This goodly company spurred us on. We made up our minds that no act or omission of ours should lower those great traditions. We knew that not everyone can be good at books or good at games or popular as a leader in the college, but we also knew that everyone can try his best to be or do all or some of these things; and we resolved that one who tried should be honored and respected by his fellows, whatever their tastes, because he was keeping up the traditions of the college and the University. We went further and determined that men who did not try, were of no use to their college or the University. I think that this self-imposed standard, which we had inherited from countless previous generations of undergraduates, enabled us to get the best out of University life. I believe that it is these influences which gave a distinction, defying time or change to a training at the older Universities.

“Out in the world or the Empire, a University degree commands respect; but taken alone, its value is only relative: for there are other ways of acquiring knowledge and other tests of efficiency than a degree. If, however, a degree is coupled with the

certainty that a man has had a university life of the right kind as well, its value is infinitely enhanced. Then, whatever your attainments may be, your fellow-men feel certain that you have a standard of character and conduct which wins through in any walk of life. In danger or difficulty, whether in private life or the larger life of a citizen of the Empire, they can rely on you to apply the clean tests and not to shirk the issue.

“You students of the University are today making the traditions of tomorrow. I trust that you may be able to feel about your University what I felt about mine; and that this feeling may be a source of strength and comfort to you in your lives and help to place your University among the great Universities of the world.”

The Special Convocation was then declared open to confer the honorary degree of Doctor of Letters of the Benares Hindu University upon the Prince. The Vice-Chancellor presented His Royal Highness to His Highness the Chancellor as a person who, by reason of his high attainments and position as the illustrious Heir to the British Throne, was eminently fitted to be honoured by the conferment of such degree. His Royal Highness stepped forward to receive the diploma from the Chancellor. While delivering the diploma, His Highness the Chancellor said :—

“By virtue of the authority vested in me as Chancellor of the Benares Hindu University, I confer upon you, Your Royal Highness, the Honorary Degree of Doctor of Letters of this University, and in token thereof I present this diploma and authorize you to wear the hood ordained as the insignia of your degree. I hope this degree will be a silken tie which will bind Your Royal Highness in sympathy with the youth of India in all their national aspirations. and

will strengthen your interest in the civilization and culture and the progress and prosperity of the people."

As His Royal Highness put the robes of the Degree and the turban, there was a loud applause from the Indian audience, who saw in the Indian head-dress a visible symbol of His Royal Highness's having become one of themselves.

His Highness the Chancellor then dissolved the Convocation.

R. K. S.



